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UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA
FOURTH DIVISION

United States of America,
Plaintiff,
and
State of Minnesota, by its
Attorney General Warren Spannaus,
its Department of Health, and
its Pollution Control Agency,
Plaintiff-Intervenor,
vs.
Reilly Tar & Chemical Corporation;
Housing and Redevelopment authority
of Saint Louis Park; Oak Park
Village Associates; Rustic Oaks
Condominium Incorporated; and
Philip's Investment Company,
Defendants.
and
City of Saint Louis Park,
Plaintiff-Intervenor,
vs.
Reilly Tar and Chemical Corporation,
Defendant.
and
City of Hopkins,
Plaintiff-Intervenor,
vs.
Reilly Tar & Chemical Corporation,
Defendant.

Civil No.
4-80-469



The Deposition of William A. Justin, taken
pursuant to Notice of Taking Deposition, taken before
Kirby A. Kennedy, a Notary Public in and for the County
of Washington, State of Minnesota, taken on the 13th,
14th and 15th days of October, 1982, at Indianapolis,
Indiana.

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APPEARANCES

DAVID HIRD, ESQUIRE, United States Attorney,
Department of Justice, 10th Street and Penn Avenue,
Washington, D.C. 20530.

ROBERT E. LEININGER, ESQUIRE, Enforcement
Attorney, 230 South Dearborn Street, Chicago, Illinois
60604, appeared for and on behalf of the United States
Enviromental Protection Agency, Region V, Plaintiff,
United States of America.

DENNIS M. COYNE, ESQUIRE, and STEPHEN
SHAKMAN, ESQUIRE, Special Assistant Attorneys General,
1935 West County Road B2, Roseville, Minnesota 55113,
appeared for and on behalf of Plaintiff-Intervenor,
State of Minnesota.

ALLEN HINDERAKER, ESQUIRE, of the law firm of
POPHAM, HAIK, SCHNOBRICH, KAUFMAN and DOTY, LIMITED,
4344 IDS Center, Minneapolis, Minnesota 55402,
appeared for and on behalf of Plaintiff-Intervenor,
City of Saint Louis Park.

EDWARD J. SCHWARTZBAUER, ESQUIRE, and BECKY
COMSTOCK, ESQUIRE, of the law firm of DORSEY and
WHITNEY, 2200 First Bank Place, Minneapolis, Minnesota
55402, appeared for and on behalf of Defendant Reilly
Tar and Chemical Corporation.

1 WILLIAM A. JUSTIN,
2 a witness in the above-entitled
3 matter, after having been first
4 duly sworn, deposes and says as follows:

5
6 MR. COYNE: This is the deposition of
7 William A. Justin taken pursuant to Notice of Taking
8 Deposition.

9
10 CROSS-EXAMINATION

11 BY MR. COYNE:

12 Q. Would you state your full name for the record?

13 A. William A. Justin.

14 Q. Mr. Justin, I will make an effort to ask
15 questions which are clear. If you don't understand the
16 question would you please ask me to clarify the
17 question? Would you do that?

18 A. Yes, I will.

19 Q. If you give me an answer to the question
20 asked and if you think that your answer is incomplete
21 would you please supplement it so that the complete
22 answer is given?

23 A. Yes, sir, I will.

24 Q. How did you prepare for your testimony today?

25 A. Through consultation with the attorneys

1 representing us.

2 Q. In any other way?

3 A. There was a witness kit prepared for me which
4 I read.

5 Q. Any other documents not contained in the
6 witness kit?

7 A. No, sir.

8 Q. And do you still have that witness kit in
9 your possession?

10 A. Yes, sir I do.

11 MR. COYNE: Mr. Schwartzbauer, we would
12 ask for you to provide that witness kit to us. Will
13 you do so?

14 MR. SCHWARTZBAUER: No. The documents
15 that are contained in it are documents that have
16 already been produced once. The witness kit is the
17 product of the efforts of the lawyers for Reilly Tar in
18 this matter just putting together those documents
19 already produced, which Mr. Justin either offered or
20 received, and I believe that you are not entitled to
21 have that from us.

22 MR. COYNE: I recognize that we have a
23 difference in opinion on that. Mr. Schwartzbauer, will
24 you agree, nonetheless, to keep those documents in safe
25 keeping?

1 MR. SCHWARTZBAUER: I certainly will.

2 BY MR. COYNE:

3 Q. Mr. Justin, apart from looking at the witness
4 kit and talking to your attorneys did you confer with
5 any other people in preparation for your examination?

6 A. No, sir.

7 Q. Have you spoken to Mr. Leshar?

8 A. In regard to what?

9 Q. With regard to your preparation for this
10 deposition?

11 A. We have discussed the fact that I would be
12 here for a deposition. Beyond that I am not clear as
13 to just what type of an answer you are interested in
14 here.

15 Q. Did you discuss with him the documents that
16 were contained in the witness kit provided to you?

17 A. No, sir, I did not.

18 Q. Did you discuss with him his previous
19 examination given during the course of his deposition?

20 A. No, sir, I did not.

21 Q. Have you reviewed the transcript of the
22 deposition of Mr. Finch?

23 A. I have reviewed part of it, not all of it.

24 Q. In general how much time did you spend in
25 preparation for the deposition would you say?

1 A. Approximately two hours reading my witness
2 kit.

3 Q. And when did you spend that time?

4 A. Last weekend.

5 Q. And that doesn't include, does it, the time
6 spent with Counsel?

7 A. That does not include the time spent with
8 Counsel.

9 Q. Mr. Justin, at the outset of the afternoon
10 you provided me with what I have marked as Minnesota
11 Exhibit Number 100, it is a resume' prepared by you, is
12 that correct?

13 A. We are looking at the same document, that is
14 correct.

15 Q. When did you prepare the resume'?

16 A. I do not recall, it's been some time ago.

17 Q. Is it within the last six months?

18 A. No, sir, it was prior to that.

19 Q. I would like you to go from top to bottom, if
20 you will, of your resume' and explain various points as
21 I question you and if you would supplement what is
22 contained on the face of the resume' to the extent
23 it's not current, would you do so?

24 A. Yes, sir, I will.

25 Q. You received your BS from the University of

1 Central Arkansas in 1956. What was your major study?

2 A. Chemistry.

3 Q. And your minors? Math and then the
4 following year at Boston College you have emission
5 spectroscopy. What was that? Was that a degree or
6 certification?

7 A. No, sir, that was a short-term course that I
8 attended after I had gone to work for Wright Research
9 and Development, they sent me to this course.

10 Q. How long a course was that?

11 A. It was a two week course.

12 Q. And then in 1971 you have shown eight hours
13 earned in management courses at the University of
14 Minnesota, is that right?

15 A. That is correct.

16 Q. Was that in graduate studies there?

17 A. No, sir, that was courses that I attended at
18 the expense of Reilly Tar & Chemical. I would consider
19 them undergraduate courses.

20 Q. Did they relate to your work then being done
21 for the company?

22 A. Yes, sir, they would.

23 Q. How was that?

24 A. When I went to Saint Louis Park I was in the
25 capacity of plant superintendent, which required

1 knowledge of management and as a result I decided to
2 take some courses in management which I had not
3 previously had.

4 Q. Do you recall the course titles?

5 A. No, sir, I do not.

6 Q. But they were just general management courses,
7 were they, or did they focus in on some special area of
8 interest?

9 A. To the best of my recollection the first one
10 would have been a general management course, the second
11 one would have been a more advanced management course.

12 Q. Did it focus, for example, on chemical
13 industries, for example, or specifically to the kind of
14 industry that you were then employed by?

15 A. No, sir, general management.

16 Q. Your employment history shows 1956 to '57 for
17 Wright Patterson Research and Development. Where was
18 that facility?

19 A. In Dayton, Ohio.

20 Q. And your responsibilities at that time?

21 A. Analytical work of ceramic and magnetic
22 materials on which they were doing research work.

23 Q. Did you have a job title?

24 A. If I did I don't recall.

25 Q. Was it a supervisory position?

1 A. No, sir.

2 Q. Was it work in their lab?

3 A. It was work in a lab.

4 Q. And what kind of equipment did you use in the
5 lab or what kind of equipment did you conduct your
6 studies with?

7 A. I used an emission spectorgraph and I used
8 X-ray defraction unit.

9 Q. Did you both operate the equipment and
10 interpret the results?

11 A. Yes, I did.

12 Q. Were you chief of the lab or did you have
13 others in your division or work with that you reported
14 to?

15 A. I had a supervisor that I reported to but I
16 was the only individual operating this equipment.

17 Q. And then you went to Tectum Corporation in
18 1957 and stayed there until 1961, is that correct?

19 A. That is correct.

20 Q. Where was that located?

21 A. That was located in Arkansas. Arkadelphia,
22 Arkansas.

23 Q. And you were the plant chemist at that time,
24 is that right?

25 A. That is correct.

1 Q. Was there more than one plant chemist?

2 A. No, sir.

3 Q. What was your work with Tectum Corporation?

4 A. Production control and quality control,
5 responsibilities for the incoming raw materials.

6 Q. And to see that the raw material met
7 specifications?

8 A. That is correct.

9 Q. What was the raw material?

10 A. The raw material was magnesium oxide, sodium
11 silicate, talc, sulfuric acid, excelsior, that's it,
12 period.

13 Q. Did you then run analysis and make a
14 determination as to whether each of these met
15 specifications as they came into the plant?

16 A. I had a technician that performed the test
17 under my supervision.

18 Q. And then you interpreted the results, is that
19 correct?

20 A. That is correct.

21 Q. Was the equipment that you used at Tectum
22 Corporation the same equipment that you had used at
23 Wright Patterson?

24 A. No, sir, it was not.

25 Q. What did you use at Tectum Corporation?

1 A. It was special equipment that was designed to
2 run I would say empirical type tests that the company
3 had designed themselves. Other than that the normal
4 type of laboratory equipment such as analytical
5 balances, thermometers, test tubes, water bottle,
6 screening, correct that, screens for screen analysis.

7 Q. I don't understand and I would appreciate it
8 if you would explain the special equipment that you
9 said was used there and how it differed from other
10 equipment that one could buy from the manufacture of
11 chemical equipment?

12 A. It would be off-the-shelf equipment that we
13 used that you couldn't buy, equipment that was designed
14 maybe to hold a sample of the material that we would
15 make up and then we would use raw materials to make a
16 crude sample of the finished product and test that to
17 see if it would meet the specifications of the finished
18 product.

19 Q. So that you could buy the equipment off the
20 shelf, so to speak, and it was modified further for the
21 special needs of the corporation, is that right?

22 A. That would be correct.

23 Q. What was the off-the-shelf equipment to which
24 modifications were made?

25 A. The water bath, for instance, was modified to

1 some extent in that we might change the framework
2 inside to hold dixie cups, for instance, that we used.
3 We used a washtub that we might add an inner shape
4 change to. Basically it would be considered crude
5 laboratory equipment.

6 Q. Crude in comparison to?

7 A. What you would buy from a chemical supply
8 house, what most people think of as chemical laboratory
9 equipment.

10 Q. Was the equipment used at Wright Patterson in
11 comparison more sophisticated?

12 A. Very much so.

13 Q. With regard to that equipment what is an
14 X-ray defraction and emission spectrographic analysis?
15 Are those different machines and can you explain what
16 they are?

17 A. They are different machines. An X-ray
18 defraction unit can be used to analyze for compounds
19 where the spectrograph would be used to analyze for
20 specific elements within the compound. The until size,
21 using an X-ray defraction unit, would draw a graph and
22 each compound has its own specific graph, finger print
23 so to speak. The emission spectrograph broke down the
24 elements and recorded specific waive lengths that would
25 be specific to an element on a photographic film, again

1 a finger print of the element.

2 Q. Well, that's a helpful explanation. There
3 are a couple of terms, and I really don't appreciate
4 the full significance of the term, but it's a term that
5 I have used and perhaps you could make a comparison to
6 either one of these terms. One is mass spectrography.
7 I understand that is analysis for a piece of equipment.
8 Is that a term familiar to you?

9 A. I am not familiar with the term mass
10 spectrography so I could not tell you.

11 Q. But there is such a machine, is there not?

12 A. I hoped I had not made it up but I thought
13 that there was.

14 Q. And then you became in 1961 the plant chemist
15 for Reilly Tar & Chemical at Granite City, is that
16 correct?

17 A. That is correct.

18 Q. Did you operate the same equipment you had at
19 Tectum or again was there a change in the equipment
20 that you had operated?

21 A. There was a change in the equipment.

22 Q. What was the equipment that you had operated
23 there?

24 A. Again, analytical balances, water bath, high
25 temperature ovens, penetration equipment, filtration

1 equipment. We also had a par bomb.

2 Q. And what was the your job responsibility as
3 plant chemist at the Granite City facility?

4 A. Quality control of incoming raw material and
5 outgoing product.

6 Q. Was there more than one plant chemist at that
7 location?

8 A. No.

9 Q. What materials did you analyze as incoming
10 raw materials at the plant?

11 A. Coal tar. The best I recall that was it at
12 that time.

13 Q. Was there any pitch that was brought onto the
14 site?

15 A. Yes, we did purchase a grade of pitch and I
16 did analyze it.

17 Q. Was there any creosote that was brought onto
18 the property?

19 A. I don't recall.

20 Q. Any fuel oils?

21 A. Fuel oils were brought on.

22 Q. But you didn't analyze those to determine if
23 they met specification?

24 A. No.

25 Q. In terms of finished product, what finished

1 product did you analyze?

2 A. Various pitches that we manufactured,
3 creosote oil, naphthalene, and some naphthalene
4 products that we manufactured.

5 Q. And what were those naphthalene products?

6 A. They were products that we sold say oil
7 industry. It was used in oil wells as a wax deterrent.

8 Q. Any other naphthalene product?

9 A. Moth balls and flake.

10 Q. Pardon?

11 A. Flake, moth flake, naphthalene flake.

12 Q. And what purchasers were there for the moth
13 balls and moth flakes?

14 A. I don't recall.

15 Q. In addition to these two naphthalene products
16 was there any other naphthalene product?

17 A. I don't recall any.

18 Q. You mentioned various pitches and what were
19 they?

20 A. Anode pitch, cathode pitch, roofing pitch.
21 We also manufactured some road tars.

22 Q. What was the user application of the road
23 tars?

24 A. I can't say what the final end-use was of
25 those.

1 Q. Was a roofing pitch also produced at that
2 location?

3 A. Yes, sir, it was.

4 Q. Any other products of that facility, other
5 than those that you have enumerated?

6 A. Not that I recall. Yes, there was one other.
7 There was a center line paint that we made for a while
8 while I was there. That was used in striping down the
9 highways.

10 Q. And was it made of a product of the refining
11 operation there or what was it made of?

12 A. It was made from a coal tar pitch and a
13 solvent.

14 Q. It was a solvent that you bought as a raw
15 material and introduced into your process?

16 A. We purchased the solvent.

17 Q. What was that solvent, do you recall?

18 A. Benzene.

19 Q. Was the plant chemist at Granite City
20 responsible to the refinery superintendent, is that how
21 the chain of command went there?

22 A. Yes.

23 Q. Ordinarily was that the case at the various
24 facilities that you were familiar with at Reilly Tar?

25 A. It was the case at the Granite City plant

1 where I was located. It was the case at the
2 Minneapolis plant where I was located. Other than that
3 I can't say.

4 Q. In 1969 you became plant superintendents
5 Saint Louis Park, is that right?

6 A. That is correct.

7 Q. And when you say plant superintendent was
8 that the superintendent of refinery operation?

9 A. That is correct.

10 Q. As distinguished from the general manager who
11 was Mr. Finch, as I understand?

12 A. Yes.

13 Q. And as plant superintendent at Saint Louis
14 Park who reported to you? What was your chain of
15 command there?

16 A. I had a foreman that was under me and he had
17 one foreman under him.

18 Q. Also assigned to the refinery?

19 A. Yes.

20 Q. Was there generally a foreman for certain
21 hours of the day or how did they divide up their
22 responsibility?

23 A. We only had supervision during the day shift.

24 Q. Were both these foremen then on duty during
25 the day?

1 A. That is correct.

2 Q. And they would alternate days, is that how it
3 worked?

4 A. No, they both worked the same hours.

5 Q. Who were they during your tenure at Saint
6 Louis Park?

7 A. The one was Monroe Brown, the other ones name
8 I do not recall.

9 Q. And there were only those two foremen during
10 the period you were at Saint Louis Park as best you can
11 recall?

12 A. To the best of my recollection, yes.

13 Q. In addition to the refinery operation were
14 you also then responsible for the laboratory facilities
15 or the chemical work done at the plant?

16 A. I had a plant chemist that worked under me
17 that was responsible for the lab.

18 Q. And who was that?

19 A. A man by the name of Ray Brown. I am sorry,
20 Ray Graham.

21 Q. And did Mr. Graham work alone or were there
22 others in the lab as well?

23 A. With the exception of a short period of time
24 he worked a loan.

25 Q. And with that exception in mind who worked

1 with him?

2 A. I don't recall. They came and went in very
3 short periods.

4 Q. So there was more than one then, was there?

5 A. Yes.

6 Q. And what was the role of these others who
7 worked with Mr. Graham?

8 A. To perform the same analysis that he
9 performed.

10 Q. Do you know the whereabouts of Mr. Graham
11 today or if he is still living?

12 A. The last I heard he is still living, I do not
13 know his whereabouts today.

14 Q. And from whom did you hear some mention of
15 Mr. Graham that you concluded that he is still living?

16 A. From his ex-wife.

17 Q. And her whereabouts?

18 A. She is living in Provo, Utah.

19 Q. And her name?

20 A. I don't know what her present married name is.

21 Q. Do you know where she works?

22 A. No, I do not.

23 Q. In addition to your responsibility for
24 operations within the refinery and the operations of
25 the lab, did you have other responsibilities at the

1 plant site as well?

2 A. Would you state that again, please?

3 Q. As refinery or plant superintendent you were
4 responsible for activities within the refinery, is that
5 correct?

6 A. That is correct.

7 Q. And in addition to that you also were
8 responsible for the conduct of the laboratory, is that
9 correct?

10 A. That is correct.

11 Q. In addition to both of those were there other
12 activities for which you were responsible?

13 A. Can you be specific?

14 Q. Well, as an example, were you responsible for
15 the wastewater facilities at the site or did people
16 look to you for advice or consultation with regard to
17 wastewater treatment facilities at the site?

18 A. I had some responsibility. I shared
19 responsibility with the superintendents of the treating
20 plant.

21 Q. Would you explain how that was or what the
22 measure of responsibility each of you had?

23 MR. SCHWARTZBAUER: Dennis, it doesn't
24 sound like you are going to finish with whatever you
25 are on and we do have to adjourn by a quarter of today.

1 Why don't we adjourn now?

2 MR. COYNE: I would like to ask a few
3 more questions. I certainly hadn't said that we would
4 conclude at a quarter to 5:00. Is there some prior
5 agreement? Let me just ask a few more questions and
6 then we can adjourn.

7 BY MR. COYNE:

8 Q. Let me go ahead a little bit and we can come
9 back to that, Mr. Justin. Are you now in charge of
10 environmental control and health and safety at the
11 plant here in Indianapolis, is that correct?

12 A. I am responsible for environmental control
13 and health and safety for the refinery division.

14 Q. On the chemical side then there is another
15 counter part to you, is there, or is there some other
16 counter part or person responsible for other
17 responsibilities at the company?

18 A. I believe there is.

19 Q. Who would that be?

20 A. I don't know.

21 Q. And did you assume this position as soon as
22 you came from Saint Louis Park then in '71 or has there
23 been a series of intermediate steps along the way to
24 your present position with the company?

25 A. No, I assumed this position when I came to

1 Indianapolis.

2 MR. COYNE: Thank you.

3

4 (At this time the deposition was recessed and
5 reconvened October 14, 1982, commencing at
6 approximately 9:30 o'clock a.m.)

7

8 BY MR. COYNE:

9 Q. Mr. Justin, since our break yesterday
10 afternoon have you reviewed any documents in
11 preparation of your testimony today?

12 A. No, I have not.

13 Q. With whom have you spoken with regard to your
14 testimony?

15 A. The attorneys representing us.

16 Q. Anyone else in addition to the attorneys?

17 A. No.

18 Q. Do you wish to change or comment on any of
19 the testimony that you gave yesterday?

20 A. I can't think of anything that I would want
21 to change.

22 Q. Your resume' indicates that you transferred
23 from the Saint Louis Park facility to Indianapolis in
24 1969. What month was that?

25 A. I don't know the exact month.

1 Q. Was it one of the summer months?

2 A. Yes, it would have been one of the summer
3 months prior to the starting of school.

4 Q. Was Mr. Finch still at the site at the time
5 you left to come to Indianapolis then?

6 A. Yes, he was.

7 Q. Yesterday you identified some of the various
8 types of equipment that you used in the laboratory at
9 the various points when you were a chemist, for example,
10 and also you identified or described some of the
11 equipment at the Saint Louis Park plant and it's
12 laboratory on the premises. Did any of that equipment
13 that you used or that you are familiar with include
14 liquid chromatography or high performance liquid
15 chromatography or gas chromatography?

16 A. No, it did not.

17 Q. Do you consider yourself well versed as to
18 these three different methods I have just identified?

19 A. No, I am not versed in the procedures used in
20 those three that you mentioned.

21 Q. So that you would not have an opinion as to
22 the accuracy or reliability of one of these three
23 methods I would take it, is that right?

24 A. I would have no opinion.

25 Q. I think when we took our break yesterday you

1 were describing or beginning to describe your duties
2 and responsibilities in your current position. As I
3 recall I asked you whether when you left the Saint
4 Louis Park facility and came to Indianapolis you
5 assumed the position that you now hold or whether there
6 were intermediate positions along the way. Could you
7 answer that?

8 A. I believe I stated when I came to
9 Indianapolis that the position I presently hold is the
10 one I assumed at that time.

11 Q. And the title of that position is?

12 A. I use the title director, environmental
13 control.

14 Q. I note that your resume' says environmental
15 control, health and safety utilities. So that
16 description and your title, director, environmental
17 control are one in the same then, is that right?

18 A. That would be correct.

19 Q. What are your responsibilities in this
20 position?

21 A. I am responsible for all aspects of
22 environmental control as they pertain to the coal tar
23 refineries with the exception I am not involved in
24 TOSCA, I do not get involved in legal matters such as
25 the recent insurance requirements under RCRA for sudden

1 and non sudden insurance. I do not do any engineering,
2 only discuss equipment with our engineering department.
3 I am responsible for all the permitting and reporting
4 with the exception of the areas that I previously
5 stated.

6 Q. When you mention reporting what do you mean?

7 A. Annual reports that have to be made to
8 various agencies regarding hazardous waste that might
9 have been disposed of off site, the routine federal,
10 state and city reports that are required.

11 Q. So that is the extent of your liaison with
12 government or the reporting agency to government, is
13 that right?

14 A. That would be a fair description, yes, sir.

15 Q. You said, as I recall, that you don't do any
16 engineering but you have discussions with the
17 engineering department about equipment. Would you
18 explain that? I am not clear on the distinction you
19 are trying to draw between the two, if you could
20 amplify on that?

21 A. I keep track of what the regulations are. I
22 advise the engineering department as to what type or
23 not necessarily what type, but what they should design
24 equipment or how they should design equipment so that
25 it would meet these regulations.

1 Q. Would it be fair to say that you identify for
2 them what the performance standard is or what the
3 regulatory requirement is that they have to design
4 toward?

5 A. That's better wording than I have.

6 Q. And that's accurate?

7 A. That is accurate.

8 Q. I recall you also mentioned that you don't
9 have responsibility for TOSCA or for insurance
10 requirements under RCRA, is that right?

11 A. That is correct.

12 Q. Who within the company is responsible for
13 those areas?

14 A. Mr. Robert Polack.

15 Q. And he is your house Counsel, is that right?

16 A. That is correct.

17 Q. Also, I believe you mentioned that you have
18 responsibility for all aspects of environmental control
19 within the refinery division, is that right?

20 A. That is correct.

21 Q. Is there someone with responsibility for
22 aspects of environmental control outside the refinery
23 division?

24 A. There would be someone responsible for
25 environmental control at the chemical plant and

1 chemical division.

2 Q. And who is that person?

3 A. I really can't say who the individual is,
4 there may be more than one involved.

5 Q. So you don't have much of a day-to-day
6 consultation with that group then I take it?

7 A. I have little to none.

8 Q. Someone mentioned the name of Ms. Kim Bennett,
9 do you know who she is?

10 A. Yes, I know Kim Bennett.

11 Q. And is she perhaps the person in the chemical
12 division with responsibility for environmental control,
13 do you know?

14 A. I know she has been involved with the RCRA
15 aspect, beyond that I don't know what her
16 responsibilities are.

17 Q. Your resume' continues with a description of
18 symposiums and workshops and, if you would, from the
19 first of these in 1970 through the most recent in 1978
20 and any subsequent that you have attended, if you would
21 just identify and briefly what the workshop or
22 symposium addressed?

23 A. In 1970 I attended a pollution abatement and
24 control symposium at Mississippi State University. The
25 best recollection I have of the program content of this

1 was that it dealt with various types of systems or
2 procedures that were being used at that time to control
3 water pollution and, as I recall, it was basically from
4 the wood treating industry. There were various papers
5 presented outlining different types of equipment and
6 concepts for treatment at that time.

7 Q. Before we go on, do you recall what some of
8 those types of systems included?

9 A. I recall one system that the effluent was
10 being discharged on to a bed of pine needles in a pine
11 forest area, I don't recall who was using that system.
12 There was a system, I believe the name was called
13 Surfpac, that was a vertical column and that's about as
14 much as I recall about that. Beyond that I don't
15 recall the rest of the content.

16 Q. Now, this symposium occurred during the
17 period of time when you were at the Saint Louis Park
18 plant. Did you go to the conference as a Reilly Tar
19 employee and and sent by the company to attend the
20 conference?

21 A. I missed part of your last question.

22 Q. Did you go as an employee of Reilly Tar as
23 opposed to on your own?

24 A. I went as an employee of Reilly Tar &
25 Chemical.

1 Q. Did the symposium have a report which was
2 issued subsequently?

3 A. Yes, there was a formal report bound and sent
4 to me.

5 Q. Mr. Justin, I think that we have with us in
6 Indianapolis a copy of the symposium papers or reports
7 and we will go back this afternoon and see if we can
8 find it and perhaps you can identify it for us if you
9 can. Would you continue then with the list of
10 workshops?

11 A. Then in 1973 I attended a workshop in Chicago
12 on OSHA titled, "A Guide to Voluntary Compliance". I
13 do not recall anything about that workshop at this time.
14 I also attended a pollution exposition in Philadelphia
15 and I have no recollection of the events that occurred
16 at that symposium or workshop.

17 Q. Do you recall if either one of those or both
18 were sponsored by government or were sponsored by
19 manufacturers of pollution equipment?

20 A. I do not recall who sponsored them.

21 Q. Were they a week long symposium or a single
22 day, do you recall?

23 A. I do not recall the length.

24 Q. Then in 1974?

25 A. In 1974 I attended an environmental symposium

1 in Washington, D.C. and again I do not recall anything
2 about that symposium. In 1975 I attended a Department
3 of Transportation seminar in Chicago and I do not
4 recall what the context of that would have been.

5 Q. Would that have been the United States
6 Department of Transportation?

7 A. Yes, sir, it would have been. Also, in 1975
8 I attended the 48th annual conference of the Water
9 Pollution Control Federation in Miami Beach, Florida.
10 I do not recall the program content of that conference.

11 Q. What kind of an organization is the Water
12 Pollution Control Federation?

13 A. I am really not familiar with that
14 organization.

15 Q. Other than having attended that conference
16 you have had no other dealings then with the
17 organization?

18 A. I don't recall any others. Also, in 1975 I
19 attended a Water Pollution Control Federation symposium
20 in Denver and I do not recall the content of that
21 symposium. In 1975 I attended a National Safety
22 Council convention in Chicago, I do not recall the
23 subject matter contained in the conferences I attended.
24 That would have been a several day conference.

25 Q. Was that a conference which addressed safety

1 issues in the work place as regards employee safety or
2 was that another Pollution Control Environmental
3 conference, do you recall?

4 A. The National Safety Council deals with safety
5 in the work place as well as in the home and away from
6 work. They do not deal in pollution control subject
7 matter. In 1976 I attended a hazardous materials
8 conference in Chicago and I do not recall the content
9 of that symposium or conference. In 1978 I attended an
10 MCA Emergency Response Workshop in Atlanta, Georgia and
11 I have no recollection of the subject matter in that
12 conference.

13 Q. What does MCA stand for?

14 A. Manufacturing Chemical Association, I believe.

15 Q. Since 1978 have you attended any other
16 symposiums or workshops?

17 A. I have.

18 Q. Would you tell us what they were?

19 A. I could tell you only in generalities. I
20 would not be able to give you dates at this time or
21 subject matter. I have attended other symposiums which
22 were sponsored by the Department of Transportation. I
23 have attended workshops that were put on by the State
24 of Illinois dealing with the new State RCRA regulations.
25 I have also attended instructional meetings which were

1 sponsored by the Utah Department of Land Resources, I
2 believe is the way they were organized, dealing with
3 the Utah State regulations governing RCRA as well as
4 the federal regulations in that region governing RCRA.
5 That's all I can recall at this time.

6 Q. Previous to your coming into the position of
7 director of environmental control, who was the
8 predecessor in that position?

9 A. There was none.

10 Q. So that was a position which was created at
11 that time and you have been the first and only director
12 of the program then, is that right?

13 A. That is correct.

14 Q. And do you have a staff working for you now?

15 A. I do not.

16 Q. And is it your responsibility, as director of
17 environmental control, to be familiar with the various
18 state requirements in addition to the federal
19 requirements as pertaining to wastewater disposal and
20 treatment?

21 A. The state requirements in which we have
22 plants located, yes.

23 Q. So then would it be fair to say the company
24 looks to you for advice as to what the requirements are
25 and what needs to be done for the various installations

1 across the country to comply with environmental
2 regulations?

3 A. As they apply to the refinery division, yes.

4 Q. Your resume' does not identify whether or not
5 you are a registered engineer. Are you registered in
6 any state?

7 A. I am not an engineer, I am a chemist.

8 Q. So that is the explanation for that?

9 A. Yes.

10 Q. Chemists don't have registrations like
11 engineers do then?

12 A. No, we have -- can we go off the record.

13 MR. COYNE: Off the record.

14 (At this time a discussion was held off the
15 record.)

16 BY MR. COYNE:

17 Q. My next question was whether or not you
18 belong to any organizations or associations and if you
19 would tell us which they are?

20 A. At this time I am not a member of any
21 organization or association. The company belongs to
22 the American Chemical Society and I am the one that
23 signs the application each year and the one to which
24 all correspondence is addressed to from the National
25 Safety Council.

1 Q. I think you just said American Safety Council?
2 Is that the same as the American chemical society, is
3 that the same or two different organizations?

4 A. No, they are different.

5 Q. Is the company a member of both then?

6 A. No, the American Chemical Society is
7 individual membership. The American Safety Council is
8 organizational type membership.

9 Q. And the company is a member of the American
10 Chemical Society but not the American Safety Council,
11 is that right?

12 A. No, the company is a member of the Safety
13 Council but not the American Chemical Society.

14 Q. We are confused on this side of the table and
15 I am not sure that it really merits a lot of
16 elaboration but I do just want to see if we can
17 straighten it out. You said, as I understand and
18 recall, that you are not a member of any organization
19 or association at this time yourself personally, is
20 that right?

21 A. That is correct.

22 Q. But the company is, is that right?

23 A. That is correct.

24 Q. And which organization or association does
25 the company have a membership in?

1 A. The American Chemical Society. I am sorry,
2 the American Safety Council.

3 Q. And would you tell us what the American
4 Safety Council addresses or what its concerns are
5 generally?

6 A. They concern themselves with all aspects of
7 safety in the work place, in the home, in every day
8 life. They have, I my say, specialty divisions that
9 deal with transportation, that deal with manufacturing,
10 that deal with hospitals, that deal with schools and
11 such.

12 Q. I notice that your resume' mentions in the
13 third line from the bottom of the resume' the National
14 Safety Council Convention. Is that the same as what
15 you have referred to as the American Safety Council?

16 A. Yes.

17 Q. Earlier you also mentioned the American
18 Chemical Society. Does the company become involved
19 with their activities as well in some way or aren't
20 they active in any of their activities?

21 A. I am not aware of any.

22 Q. Are there any environmental associations or
23 programs in which the company regularly participates
24 currently?

25 A. Would you state that question again, please?

1 Q. As I understand the American Safety Council,
2 also known as the National Safety Council, concerns
3 safety in the work place in the home and the like.
4 It's not really a water pollution control or regulatory
5 kind of organization, is that right?

6 A. That is correct.

7 Q. And what I am wondering is if there is some
8 organization in the water pollution, pollution
9 abatement, regulatory area that the company is involved
10 with on an ongoing basis?

11 MS. COMSTOCK: Maybe for clarification,
12 Dennis, are you asking for membership status, for
13 instance? That might be a place to start.

14 MR. COYNE: Sure. Thank you.

15 A. I know of no organizations that the company
16 belongs to whose specific job is in the narrow field of
17 pollution control as it applies to water.

18 Q. You just really emphasized and perhaps
19 limited my question a little more than I would like.
20 Is there any other organization dealing more generally
21 with pollution abatement issues which a company would
22 participate in as a member or otherwise?

23 A. There are organizations that the industry
24 belongs to that from time to time would discuss these
25 matters.

1 Q. And which organizations would those include?

2 A. The American Wood Preserving Institute, I
3 believe, would be one. The Manufacturing Chemical
4 Association. That's all I can think of at the time.
5 To the best of my knowledge they would only be dealing
6 in generalities.

7 Q. Now, when the company has some dealings or
8 contacts, for example, with the AWPI or the
9 Manufacturers Chemical Association, who in the company
10 would make that contact as a general matter?

11 A. With AWPI Mr. Leshner would be the primary
12 contact. At times I have attended meetings dealing
13 with a specific committee that he was on acting as his
14 representative. I am not sure who attends the other
15 meetings.

16 Q. The committee with the AWPI, which committee
17 was that?

18 A. That was a committee dealing with the
19 registration of creosote or better known as RPAR.

20 Q. And you attended one committee meeting of
21 that group, is that right?

22 A. I have attended several meetings.

23 Q. And when was that?

24 A. I could not give you specific dates.

25 Q. Would it have been this year or last year?

1 A. I have attended one that I know of this year,
2 beyond that I cannot say what years or dates.

3 Q. Do you mean the Chemical Manufacturers
4 Association rather than the Manufacturing Chemical
5 Association, or do you know?

6 A. It would be Manufacturing Chemical
7 Association.

8 Q. When you came to Saint Louis Park as refinery
9 superintendent in 1969 you replaced a Mr. Danz, did you
10 not?

11 A. No, I did not.

12 Q. Who did you replace?

13 A. I replaced a Paul White.

14 Q. And was Mr. Danz at one time a refinery
15 superintendent at the site?

16 A. I believe that is correct.

17 Q. Would he have preceded Paul White?

18 A. To the best of my recall he would have.

19 Q. Did Paul White retire at the time you took
20 the position at Saint Louis Park?

21 A. No, sir, Paul White quit the company to work
22 for someone else.

23 Q. And do you know who he went to work with?

24 A. I do not recall.

25 Q. Was it someone in the Twin Cities area?

1 A. I do not recall.

2 Q. Prior to coming to Reilly Tar in Saint Louis
3 Park in 1969, had you previously visited the site?

4 A. I made one visit to the site at the time they
5 asked me to make the move. Prior to that I had made
6 visits to the site.

7 Q. You mentioned that the company requested that
8 you make the move, is that right?

9 A. That is correct.

10 Q. And would you tell us what the circumstances
11 were at the time the request was made?

12 A. Paul White, the superintendent, had given
13 them a two week notice. They obviously needed a
14 superintendent. For reasons known only to the company
15 they decided that I should be that individual.

16 Q. How did they describe the position that you
17 were going to assume in Saint Louis Park? What did you
18 expect to accomplish there? Was there some special
19 emphasis or priority of things that you were to do?

20 A. Not that I recall. The duties that I
21 expected, as in fact it turned out to be, were
22 basically the responsibility of production in the
23 refinery division. It was my responsibility to see
24 that materials were processed that met customer
25 specifications and that they were shipped on schedule

1 and arrived on schedule.

2 Q. So then you made your move from Granite City
3 to Saint Louis Park on fairly short notice then I take
4 it?

5 A. It was short notice but it took some time
6 before the move was finally completed.

7 Q. What time of the year did you come to Saint
8 Louis Park? Do you recall whether it was the summer or
9 the fall or the season of the year in 1969?

10 A. It would have been in the summer.

11 Q. So you came to the site in the summer of '69
12 and you left in the summer of '71, is that right?

13 A. I was there two years, that would be correct.

14 Q. Was the facility at Granite City both a
15 refinery and wood treating facility?

16 A. No, it was a refinery facility only.

17 Q. What water pollution equipment did Granite
18 City have at the time when you worked at Granite City?

19 A. I do not recall any water pollution control
20 equipment at the Granite City plant at that time.

21 Q. Where did the waste stream from the plant
22 discharge at Granite City?

23 A. It discharged to a lagoon on the property.

24 Q. Is the Granite City operation still in
25 operation?

1 A. Yes, it is.

2 Q. And I assume that today there are controls,
3 is that right, wastewater treatment controls?

4 A. There are some. We are in the process of
5 building a rather elaborate treatment facility at that
6 plant. We are in the process of getting it permitted
7 at this time.

8 Q. Permitted by the federal or state government
9 or both?

10 A. State and also the city.

11 Q. And you have a federal permit for that
12 facility currently?

13 A. A federal permit is not required.

14 Q. And the reason?

15 A. The state has the primary responsibility for
16 the control of wastewater.

17 Q. They have been delegated the federal program?

18 A. They have been delegated the authority.

19 Q. Was the maintenance and housekeeping at the
20 refinery in Granite City comparable to that in Saint
21 Louis Park at the time that you made the transfer?

22 A. I would say the maintenance and housekeeping
23 at Saint Louis Park was to some degree better than that
24 at Granite City.

25 Q. And how was that?

1 A. When I arrived they had recently completed
2 some extensive renovation of the pipe lines and storage
3 tanks and had an ongoing program to continue
4 improvement of the plant.

5 Q. So that to some degree the equipment was
6 better at Saint Louis Park than at Granite City?

7 A. In some respects, yes. In some respects, no.

8 Q. In what respects would that not be the case?

9 A. When you say "equipment", I am thinking of
10 everything, including the stills, the buildings, pumps
11 and the age of the stills at Saint Louis Park may or
12 may not have been different from the age of the stills
13 at Granite City. Basically the types of equipment were
14 the same at both plants, they only varied in age.

15 Q. Are there any respects in which the Saint
16 Louis Park facility did not have better equipment or
17 was to some extent inferior to the Granite City
18 facility in regard to the refinery operation?

19 A. I believe the Saint Louis Park plant
20 equipment on the whole was in better condition than
21 that at Granite City.

22 Q. I think you mentioned that in addition to the
23 improved piping and storage tanks that there was an
24 ongoing program of improvement. Would you describe
25 that program and whether it was carried out while you

1 were there?

2 A. When I arrived from that point on it was
3 basically a general clean up program in which I would
4 attempt to pick an area, clean it up, improve it, and
5 then try to maintain that condition. It included doing
6 away with the remaining trench system, painting tanks,
7 painting the refinery building, general overall
8 appearance, improvement.

9 Q. When you said "the trench system", is that
10 the underground system that housed underground pipes in
11 the area, is that what you are referring to?

12 A. The trench system I refer to is the trench in
13 which the old pipes had been contained and had been
14 done away with at the time I arrived.

15 Q. So that the piping had been moved above
16 ground at that point then?

17 A. That is correct.

18 Q. In general can you identify the area of the
19 plant site where that change had been made where the
20 pipes had been brought from below ground to above
21 ground, would that have generally been the area west of
22 the refinery, for example? You can refer to our large
23 map on the wall.

24 A. The area that I am thinking of would be the
25 area where the trench was located in this area with

1 respect to the refinery. If that's north it would be
2 on the southwest. I always considered that the south
3 side.

4 Q. The trench system was no longer needed once
5 the pipes were moved above ground, is that right?

6 A. That's correct.

7 Q. Would you describe what was done with the
8 trench system then after the pipes were moved above
9 ground?

10 A. The sections of the trench system that were
11 there when I arrived were filled in to grade level.

12 Q. So they were filled in rather than being
13 excavated, is that right? I am wondering if the trench
14 was filled in as distinguished from having the trench
15 excavated and then filled in?

16 A. At this time I can't recall if it was
17 necessary to excavate anything prior to filling.

18 Q. Were some of the trenches filled after you
19 came to the site?

20 A. The ones I am speaking of were filled after I
21 came to the site.

22 Q. And do you recall whether or not the trenches
23 were excavated, the debris removed, or whether they
24 were filled in without prior excavation?

25 A. I thought that was the question I had

1 answered prior to this question.

2 Q. And that being the question your answer would
3 be that they were not excavated prior to being filled,
4 is that right?

5 A. No, I believe I stated that they may or may
6 not have been excavated, I do not recall. Some
7 sections of them may have been, some sections of them
8 may not have been, depending on their condition.

9 Q. Thank you for clarifying that. There are a
10 couple of names that I have and I would like to inquire
11 as to whether or not you know these people and whether
12 they are presently retired or not. One is an L. W.
13 Boyer. Do you know his whereabouts?

14 A. I believe he is living in one of the
15 Carolinas at this time and is retired.

16 Q. Do you know which Carolina it would be?

17 A. No, sir, I do not.

18 Q. Do you know approximately when he retired
19 from the company?

20 A. It's been since I came to Indianapolis but I
21 do not know the year.

22 Q. And Mr. W. R. Wheeler is still employed by
23 the company, is he not?

24 A. No, I believe Mr. Wheeler is retired.

25 Q. Is he?

1 A. Yes.

2 Q. Do you know when he would have retired?

3 A. No. As I say, I don't know whether he has or
4 is.

5 Q. His position with the company?

6 A. I don't know.

7 Q. I have some general questions that I would
8 like to ask you about the plant site and in the course
9 of your answers I would encourage you to refer to the
10 mylar map, the state exhibit, if that would be helpful
11 to you, remembering that if you refer to an area on the
12 map if you describe it for the benefit of the Court
13 Reporter and then describe the area you are indicating
14 on the map.

15 In addition to the trench system that you
16 have described as generally being south of the refinery,
17 there were, in addition, some open trenches on the
18 plant site, isn't that correct or tile fields on the
19 plant site? I am now referring to the wastewater
20 disposal trench system.

21 MS. COMSTOCK: Can you clarify the
22 period of time you are talking about here?

23 MR. COYNE: The period of time when Bill
24 was on the site?

25 A. As I recall there was a trench system as well

1 as -- or I would describe it more as a ditch rather
2 than a trench and a tile system.

3 Q. Where was the tile system? Was it located
4 where -- it's generally indicated to be on the state
5 exhibit. You will notice that there is indicated at
6 the north side of the refinery by a dashed line a
7 wastewater trench or ditch system or tile field system
8 leading from the refinery to what's indicated as a sump
9 and hay filter or the settling basin and then
10 continuing on west to the edge of the plant property
11 and then south to Walker Street. Is that your general
12 recollection of the course of the wastewater trench or
13 tile field system?

14 A. I have no recollection of the tile system
15 from this point.

16 Q. What point would you describe that as?

17 A. At the refinery. At the northern point of
18 the refinery. The northern part of the refinery
19 extending over to the sump and hay filter area. I do
20 have a recollection of the tile system from the sump
21 and hay filter area continuing over to the western
22 boundary and then going south and then turning back
23 east where it became an open ditch at that time prior
24 to going through another hay filter and a weir.

25 Q. And the hay filter is identified on the

1 Walker Street point, isn't that correct?

2 A. Is this Walker Street?

3 Q. Yes, this would be Walker Street at the
4 bottom.

5 A. Yes, that is correct.

6 Q. The weir that you mentioned, was that located
7 approximately where the hay filter is indicated?

8 A. It was at the same point.

9 Q. How did the waste stream, if there was a
10 waste stream, move from the refinery to the settling
11 basin during the period when you were on the plant site?

12 A. I recall that we pumped it but I am not sure
13 as to the path it took.

14 Q. So there was a waste stream from the refinery
15 to the settling basin but you are not sure as to how it
16 was conveyed, is that fair to say?

17 A. That is correct.

18 Q. And it was a tile field then from the
19 settling basin down to Walker Street where the flow
20 emerged in an open ditch through the hay filter and
21 through the weir and then moved south of the plant site
22 below Walker Street, is that right?

23 A. That's correct, to the best of my
24 recollection.

25 Q. In addition to the ditch along Walker Street,

1 along the southern edge of the property, were there
2 other open ditches on the plant site, do you recall?

3 A. Yes, I recall one other that started in the
4 vicinity of the -- what is described on your mylar map
5 as the tanker unloading shed and the tar cistern and
6 ran in a west -- northwest direction from that point.

7 Q. So if you refer to the numbers on the map,
8 and these are numbers for various tanks in the area
9 south of the refinery, would you generally describe the
10 location of the ditch using these tank numbers as a
11 reference?

12 A. It would be difficult because the ditch,
13 which I believe was a remaining part of the old trench
14 system, was not near Tank 1, it would be on the
15 opposite side of the building from Tank 1, and run
16 between that building and the tar cistern.

17 Q. And then as you described, it generally was
18 located or ran from there generally west, is that right?

19 A. That is correct.

20 Q. And approximately where would it have
21 terminated?

22 A. I don't recall where it terminated. I know
23 there was a point at which we could pump from it to the
24 sump or hay filter area or to other tankage if we
25 wished.

1 Q. Was that basically part of your wastewater
2 control then, that ditch?

3 A. No, it was a remaining trench that had not
4 been filled or disposed of. It was basically not in
5 use, it was just there.

6 Q. And sometimes the Reilly staff would pump
7 from the ditch into either tank on the one hand or the
8 settling basin on the other, is that right?

9 A. It was possible to do so. I can't recall any
10 reason for routine pumping.

11 Q. Was it ever pumped?

12 A. I can't say.

13 Q. Would material or water flow through that
14 ditch into the settling basin or would it have to be
15 pumped from the ditch up to the settling basin?

16 A. I don't recall.

17 Q. Were there ever occasions when the flow in
18 the ditch would go to the south and east rather than to
19 the north and west?

20 A. There were occasions when flooding occurred
21 in the plant that, yes, the whole area would be
22 inundated and the general flow of the water was towards
23 Walker Street.

24 Q. There has been some mention made of a ditch
25 which ran generally to Walker Street and connected with

1 Walker Street in some way. Are you familiar with any
2 ditch or water conveyance which would have connected to
3 Walker Street in addition to that tile field system
4 that we have already identified which flowed from the
5 settling basin westward to the western edge of the
6 property and down to Walker Street?

7 A. I can't recall any.

8 Q. You mentioned a weir nearby to the hay filter,
9 was that a weir that was constructed during the time
10 that you were on the plant site?

11 A. I don't recall whether it was constructed
12 after I got there or was there at the time I got there.

13 Q. How big was the weir? Would you describe its
14 appearance for us?

15 A. It was a V notch weir used for measuring flow.

16 Q. Would you describe a V notch weir and how it
17 works and how one can measure the flow using a weir
18 like that or how Reilly Tar measured the flow?

19 A. The principal behind the V notch weir is
20 beyond my expertise. Our engineers designed it, they
21 designed the angle of the notch, and they gave me a
22 table that said if so many inches flow over this notch
23 so many gallons are flowing.

24 Q. So that one would go to the weir, observe the
25 water flowing through, note the elevation of the water

1 flow and then calculate the volume of water moving
2 through the weir, is that right?

3 A. That's correct.

4 Q. Was that visual observation made routinely or
5 only once in a great while or what was the practice
6 with regard to noting the water flow through the weir?

7 A. I can't recall with what frequency we
8 measured the flow.

9 Q. Was it more than once during your two-year
10 period there?

11 A. Oh, yes.

12 Q. Would it have been a common practice to do so
13 once a week would you say?

14 A. I can't recall.

15 Q. Or once a month?

16 A. I can't recall.

17 Q. More than once a year?

18 A. More than once a year.

19 Q. What was the purpose for noting the flow
20 through the weir?

21 A. I can't recall our specific reason or
22 reasoning at that time.

23 Q. Was it because the company was designing some
24 other wastewater treatment facility and wanted to know
25 the volume of water moving off the site at that point?

1 A. I can't say.

2 Q. Whose responsibility was it to note the water
3 flow through the weir?

4 A. That would depend on who Mr. Finch asked to
5 do it at any particular time. He may have requested
6 that I gather the data for him, he may have requested
7 that Ward Barton be responsible for gathering it.

8 Q. You don't recall whether or not you were
9 asked to acquire data with regard to the volume of
10 water moving through the weir?

11 A. I recall collecting data on volumes of water,
12 I do not recall the times.

13 Q. The data that you collected would indicate a
14 flow through the weir in what sort of magnitude? To
15 put it in other terms, what was the volume of water
16 moving through the weir in general terms if you can't
17 recall specifically?

18 A. I have no idea and I don't even remember what
19 units we would have been recording it in.

20 Q. What was the approximate height or width of
21 the weir itself, would it have been 10 feet high and 20
22 feet wide, or what general size was the weir?

23 A. I really don't know.

24 Q. Was there a culvert beneath Walker Street or
25 how did water move under Walker Street?

1 A. As I recall there was a culvert.

2 Q. Did it sometimes fill with debris or solid
3 material or partially fill?

4 A. I don't recall.

5 Q. Was it ever cleaned?

6 A. I don't recall.

7 Q. Was it ever your responsibility to see that
8 the culvert was cleaned or maintained?

9 A. Not to my recollection.

10 Q. You will note on the aerial photograph behind
11 you, which has been marked Reilly Tar 3 --

12 A. I note the aerial photo.

13 Q. You will note that Walker Street is shown.
14 Do you see that?

15 A. Yes, I do.

16 Q. And to the north of Walker Street is the
17 plant site and it's noted as Republic Creosoting here
18 on the aerial photo, do you see that?

19 A. I do.

20 Q. Then there is an area between Walker Street
21 and State Highway 7. Do you note that area?

22 A. I do.

23 Q. And then there is an area still further to
24 the south of the plant site, an area between the state
25 highway and what is shown as Walker Street, do you note

1 that?

2 MR. SCHWARTZBAUER: Lake Street.

3 BY MR. COYNE:

4 Q. I am sorry, Lake Street, do you note that?

5 A. I note that.

6 Q. And an area south of Lake Street and the
7 railroad tracks, the railroad tracks are not noted as
8 such on the map but there is an area south of Lake
9 Street as well?

10 A. I note the area you are pointing to.

11 Q. Now, the area south of Walker Street and
12 above the State highway was a low laying or swamp area,
13 was it not?

14 A. I believe it would depend on what area within
15 that area you are speaking of.

16 Q. Was it generally an area which was low laying
17 or which included large swamp areas or how would you
18 describe this area between Walker Street and state
19 Highway 7, the area below or south of the Republic
20 Creosoting Reilly Tar site?

21 A. As I recall there was an area south of Walker
22 Street on the eastern part of the area in question that
23 could be considered possibly a low lying area, some
24 sections of it. I remember some type of industrial
25 plant located in that area, then the western part of

1 that area, as I recall, elevated quite steeply up
2 towards Pennsylvania Avenue.

3 Q. The plant effluent which passed through the
4 culvert beneath Walker Street, where did it flow after
5 passing under Walker Street?

6 A. As I recall it flowed into what I would
7 describe as a ponding area and I don't believe there
8 was any outflow from that area.

9 Q. Would it have continued at times to flow,
10 that is the effluent flow, beneath the state highway
11 and to the area south of the state highway?

12 A. It was my understanding that there was no
13 drainage system or culvert system provided under the
14 State Highway 7 in which it could have flowed south of
15 that highway.

16 Q. In this area, Mr. Justin, that you have just
17 identified as a ponding area, the area between Walker
18 Street on the north and State Highway 7 on the south,
19 were tests done to determine the phenol content of the
20 water in that ponding area?

21 A. I can't recall any specific incident.

22 Q. Do you believe that tests were ever done of
23 phenol in the water in that area?

24 A. I have no personal knowledge of it at this
25 time.

1 Q. Apart from your own personal knowledge of
2 specific tests being taken, do you have any reason to
3 believe that tests were ever taken of the swamp water
4 in that area?

5 A. I just don't recall any tests being made
6 during my period at the plant.

7 Q. Do you have any recollection or reason to
8 believe that tests were taken in the period other than
9 when you were at the plant site in '69 to '71?

10 A. I have no way of knowing.

11 Q. Other than tests for phenols, would other
12 analytic tests have been made, do you recall, or do you
13 have any reason to believe with that water in the
14 ponding area between Walker Street and State Highway 77?

15 A. I don't know.

16 Q. Do you know whether the peat deposits in that
17 area were ever tested or have reason to believe they
18 were ever tested?

19 A. I have no recollection at this time.

20 Q. What was the appearance of this swamp area or
21 what you have referred to as this ponding area between
22 Walker Street and State Highway 77?

23 A. At this point in time I have a very vague
24 recollection of that area. My recollection is that I
25 would not consider it a large area. I believe there

1 was some trees or shrubs in the area. Beyond that I
2 have no clear recollection.

3 Q. Was there a ditch that moved through this
4 area that carried the effluent?

5 A. Which area are you speaking of?

6 Q. Again, the area between Walker Street and
7 State Highway 7.

8 A. You say a ditch that moved through the area
9 from where to where? I have no recollection of a ditch.

10 Q. If we were to stand on Walker Street and look
11 to the north at the time when you were there, between '69
12 and '71, we would see an open ditch just to the north
13 of Walker Street, would we not?

14 A. On Reilly's property, that's correct. Yes,
15 you would see an open ditch running in an east-west
16 direction.

17 Q. Then if we were to turn and look to the south
18 with the plant site behind us and looking south towards
19 State Highway 7, would we see the flow emerge from
20 under Walker Street in a ditch?

21 A. As I recall it emerged from under Walker
22 Street and went directly into the ponding area. I
23 would not describe it as a ditch.

24 Q. How would you describe it?

25 A. Just coming out from under Walker Street and

1 immediately being in the ponding area.

2 Q. Did that pathway, speaking now from the
3 culvert beneath Walker Street into the ponding area
4 south of Walker Street, ever become obstructed?

5 A. I don't recall.

6 Q. Do you recall whether it was ever cleaned?

7 MS. COMSTOCK: I believe the witness has
8 answered these questions, Mr. Coyne.

9 THE WITNESS: I have.

10 BY MR. COYNE:

11 Q. And your answer is to the best of your
12 recollection there was never any ponding area south of
13 Walker Street, is that correct?

14 A. I don't recall any during my tenure.

15 MS. COMSTOCK: Mr. Coyne, would this be
16 a good time for a five minute break to allow the
17 witness to smoke?

18 MR. COYNE: Sure, Mr. Justin.

19 (At this time a recess was taken.)

20 BY MR. COYNE:

21 Q. Mr. Justin, we have been talking about the
22 area south of Walker Street, the ponding area, in this
23 area the U.S. Geologic Survey has recently been doing
24 some studies and they have generally concluded that
25 there is a hydrocarbon fluid phase in the ground water

1 in this area. Would you have any reason to believe
2 that the Reilly Tar effluent or waste water is not the
3 cause of this hydrocarbon phase?

4 A. I would have no reason to believe one way or
5 the other.

6 Q. So you would have no opinion on the matter?

7 A. That is correct.

8 Q. There is an area shown on the mylar map, the
9 state exhibit, on the north end of that plant site and
10 it's marked on the map as an open area. Do you recall
11 an open area at the extreme northern side of the
12 property?

13 A. Vaguely.

14 Q. What use was made of this extreme northern
15 end of the Reilly Tar facility?

16 A. I don't recall.

17 Q. Do you recall whether or not there was debris
18 and refuse in this area or not?

19 A. I don't recall.

20 Q. Was there a storm sewer proposed for this
21 northern area, do you recall?

22 A. I do not recall.

23 Q. Was there a storm sewer proposed for other
24 areas of the Reilly Tar facility in Saint Louis Park?

25 A. When you are speaking of storm sewer being

1 proposed, proposed by who?

2 Q. The City of Saint Louis Park.

3 A. I don't recall.

4 Q. You don't recall any storm sewer being
5 proposed to pass through or by the Reilly Tar facility,
6 is that correct?

7 A. I have only heard of reference to a storm
8 sewer being proposed. I don't recall the location or
9 direction.

10 Q. And where did you acquire that information?

11 A. I don't recall.

12 Q. Would it have been information that you
13 acquired at the time you were at the plant site or
14 information acquired recently?

15 A. I don't recall when I became aware of it.

16 Q. Were there soil tests made at the plant site,
17 do you know?

18 A. I recall some soil borings being made and I
19 believe they were made as a result of our plans to
20 install a sewer system that would be used to connect to
21 the sanitary sewer system. They would have been taken
22 for purposes of our engineering department designing a
23 system.

24 Q. Was the sewer system to which you refer a
25 sanitary sewer system or a storm water sewer system?

1 A. You are speaking in reference to the system
2 we were going to install?

3 Q. Correct.

4 A. I don't recall where we planned to discharge
5 it to. It was a system that was going to collect our
6 wastewater so that we could discharge to Saint Louis
7 Park's system but I don't recall whether we planned to
8 discharge it into their storm water system or their
9 sanitary system.

10 Q. So that sewer was not to be designed to carry
11 storm water off the site but rather to carry the waste
12 stream from the operation off the site, is that correct?

13 A. I don't recall what our exact plans were.

14 Q. But in general do you recall that it was -- I
15 believe it was your previous testimony that it was
16 designed to carry the waste water flow from the site
17 and to connect that flow either to the city -- was it
18 to the city that the flow was to be connected?

19 A. I believe I stated that I wasn't sure whether
20 we were going to the city's sanitary system or to the
21 city storm system with the effluent.

22 Q. The effluent was the waste stream, is that
23 right?

24 A. I don't recall whether we planned to try and
25 separate waste water from storm water as a result of

1 flooding or whether we were going to collect the entire
2 system and discharge all water.

3 Q. There is some mention in documents about
4 Edens Model 1150 separator. Do you recall such a
5 separator?

6 A. I don't recall the model number, I recall an
7 Eden separator.

8 Q. How would that fit into this sewer work that
9 Reilly Tar was contemplating?

10 A. The Eden separator would have been used to
11 separate any residual oils from the wastewater prior to
12 discharge.

13 Q. From time to time the plant site was flooded,
14 was it not, by storm water?

15 A. That is correct.

16 Q. Was it the intent at the time to segregate
17 the storm water from the wastewater and send only the
18 wastewater through the Eden separator?

19 A. I --

20 MS. COMSTOCK: Excuse me, Dennis. I
21 believe he has answered these questions for you.

22 MR. COYNE: Becky, I am not trying to be
23 repetitive. I am trying to focus on the Eden separator
24 and whether the design was to have that separator
25 handle all flows or only the wastewater stream.

1 MS. COMSTOCK: Perhaps you can restate
2 your question.

3 BY MR. COYNE:

4 Q. If you can understand the question, Mr.
5 Justin, I would like you to answer it. If you don't
6 understand the question, Mr. Justin, I would like you
7 to rephrase it.

8 A. I don't recall what water we intended to
9 channel through the Eden separator, whether we intended
10 to channel only water from the process or whether we
11 intended to channel all water through it.

12 Q. The soil tests that were made, what were the
13 results of the soil testing?

14 A. I do not know.

15 Q. Do you know whether the soil testing was done
16 by Reilly Tar or did Reilly retain outside consultants
17 to do that work?

18 A. I believe we obtained outside consultants to
19 do it.

20 Q. Would you know who those consultants were?

21 A. No, sir, I would not.

22 Q. Mr. Justin, you said I believe that you left
23 the plant site in the summer of 1971. Were demolition
24 activities underway at that time?

25 A. Not to my recollection.

1 Q. Was the refinery still in operation at that
2 time?

3 A. As I recall it was in what I would describe
4 as a winding down situation. There was some processing
5 still going on when I left.

6 Q. And was wood treating going on as well at
7 that time?

8 A. I don't recall.

9 Q. When you left the plant site, were there
10 plans for the demolition of the site?

11 A. I don't recall what plans were in effect at
12 that time.

13 Q. Had the decision been made by management to
14 close the facility?

15 A. Yes.

16 Q. Do you know when the refinery facility did
17 actually cease operations or approximately when it did?

18 A. I don't recall the approximate date.

19 Q. Was the refinery equipment being dismantled
20 at the time you left the plant site?

21 A. I don't recall any dismantling being in
22 progress at the time I left the plant.

23 Q. I believe your testimony was yesterday, and
24 correct me if I am wrong, that in addition to being
25 responsible for activities within the refinery you were

1 responsible for the laboratory testing in the lab
2 facility, is that right?

3 A. I supervised the operation of the lab, yes.

4 Q. Did you have some responsibility or
5 supervision of the waste water system including the
6 settling basin, the tile field, the ditch and so forth?

7 A. Basically Ward Barton took care of the
8 settling basin and the tile system and, as I recall,
9 some of his men handled the changing of the filter.

10 Q. Men assigned to you then did not change the
11 filter, is that right?

12 A. To the best of my recollection my men were
13 not involved.

14 Q. And the best of your recollection then you
15 had no responsibility for the settling basin and tile
16 system, is that right?

17 A. When you speak of responsibility, it would
18 depend on whether Mr. Finch had asked me to perform a
19 specific operation or job or whether he had asked Mr.
20 Barton, but generally Mr. Barton took care of that
21 system.

22 Q. Were there ever occasions when Mr. Finch
23 asked you to perform some activities or undertake some
24 action with regard to the wastewater system?

25 A. I recall being involved with the system.

1 Basically it would have been sampling effluent and
2 obtaining analysis on it. He may have also requested
3 that I back up Mr. Barton or also see that the straw
4 filter was changed or cared for.

5 Q. Did he ask you to back up Mr. Barton?

6 A. I don't recall.

7 Q. Did you take samples or did people working
8 for you take samples of the effluent and were analysis
9 made?

10 A. There were times when analysis were made and
11 people working for me would have taken the samples.

12 Q. And where were samples taken?

13 A. I can't recall specific locations. They
14 would have been taken as a result of instructions from
15 Mr. Finch.

16 Q. Were samples taken from the sump at the
17 settling basin?

18 A. They may have been. I do not recall.

19 Q. Were they taken from the settling basin?

20 A. I thought that was the question you just
21 asked me.

22 Q. Thank you for raising that point. I am
23 distinguishing between the sump, and I understood there
24 was a sump from which the waste water was taken by pump
25 into the settling basin, isn't that correct?

1 A. There was a lift pump but I don't recall the
2 exact configuration of the system.

3 Q. So I understand your testimony to be that you
4 don't recall whether or not there were samples taken
5 from that lift pump, is that correct?

6 A. That is correct.

7 Q. Distinguishing that lift on the one hand from
8 the settling basin itself on the other, and I would
9 direct your attention to the settling basin and ask
10 whether or not samples were taken from the settling
11 basin?

12 A. I don't recall any specific instances.

13 Q. Do you have reason to believe that samples
14 were taken from the settling basin?

15 A. They may have been. I have no recollection.

16 Q. Were samples taken of the flow through the
17 drain tile as the drain tile went from the settling
18 basin to Walker Street?

19 A. I have no recollection of any sampling being
20 taken in the drain tile itself.

21 Q. Do you have any recollection or reason to
22 believe that samples were taken in the open ditch along
23 Walker Street?

24 A. I can't recall taking samples in the open
25 ditch itself.

1 Q. Do you recall samples being taken or have
2 reason to believe that samples were taken in that area
3 at all?

4 A. I recall samples being taken of the effluent
5 as it came out of the V notch weir.

6 Q. At what location would that have been? Would
7 that have been to the south or to the north of Walker
8 Street?

9 A. It would have been to the north of Walker
10 Street.

11 Q. At the point where the flow went into the
12 culvert, is that right?

13 A. It would have been at the point where the
14 water came over the V notch weir.

15 Q. And how many times, approximately, were
16 samples obtained from that point?

17 A. I have no idea.

18 Q. What was the reason for taking the samples at
19 that point?

20 A. I don't recall the specific reason.

21 Q. Do you recall in general the reasons or what
22 would the reasons include?

23 A. To determine what the phenol content of our
24 effluent was.

25 Q. Did you test only for phenols?

1 A. I don't recall what all we tested for.

2 Q. Did Reilly Tar run its own analysis of those
3 samples or did consultants to Reilly Tar do the
4 analysis?

5 A. Both. In some instances we would run an
6 analysis in our lab and in other instances analysis
7 would be performed by an outside lab.

8 Q. Is the firm of Twin City Testing familiar to
9 you?

10 A. The name is familiar.

11 Q. Might that have been one of the consultants
12 used by Reilly Tar to run analysis?

13 A. It may have been.

14 Q. Do you know if it was?

15 A. I don't recall for certain.

16 Q. Do you believe it was?

17 A. I really don't recall.

18 Q. When you referred a moment ago to "our lab",
19 meaning a Reilly Tar lab, do you mean the facility at
20 Saint Louis Park or some Reilly Tar facility at some
21 other location?

22 A. The laboratory at Saint Louis Park.

23 Q. What prompted the interest in the measure of
24 phenols moving off site?

25 A. I don't recall. All I recall is that at some

1 point in time Mr. Finch asked me to obtain samples and
2 obtain analysis on the samples.

3 Q. And you reported those analysis to Mr. Finch,
4 did you?

5 A. That is correct.

6 Q. Do you recall whether there was more than a
7 single occasion when samples were taken at that point?

8 A. I don't recall the frequency of analysis or
9 the number that we had taken, no. Certainly more than
10 one sample.

11 Q. Were there other sampling points on the
12 Reilly Tar site in addition to this sampling point to
13 which you have testified?

14 A. I can't recall any at this time.

15 Q. Were there additional sampling points off
16 site, off the Reilly Tar facility?

17 A. I recall taking samples off site.

18 Q. And what was the purpose of doing so?

19 A. Mr. Finch requested at one point, I recall,
20 that I take samples from various surface waters in the
21 area, both north -- I don't recall all of the
22 directions but some distance from the plant site.

23 Q. And the purpose in doing so?

24 A. I don't know what his purpose was, he just
25 asked that I obtain the samples and obtain an analysis.

1 Q. You had no discussion with him as to the
2 purpose for doing so?

3 A. I may have but I don't recall the content of
4 that discussion.

5 Q. Did you have conversations with anyone else
6 within Reilly Tar with regard to the purpose of taking
7 those samples off-site?

8 A. I don't recall any.

9 Q. Or for taking the samples on site?

10 A. I can't recall any specific discussions.

11 Q. Do you have reason to believe you had
12 discussions with other than Mr. Finch with regard to
13 the sample taking and the purpose for doing so?

14 A. I can't recall anyone else.

15 Q. Mr. Justin, I am showing you what has been
16 previously marked as State's Exhibit Number 10 and you
17 will note that it's dated February 5, 1971, it's
18 written by Mr. Boyle to Mr. Finch, it's with regard to
19 securing a U.S. Army Waste Materials Permit. Would you
20 take a moment and read through that exhibit, please?

21 A. I have read the document in question.

22 Q. Have you ever seen this document before?

23 A. I do not recall having seen this document
24 before.

25 Q. The date of February 5, 1971, that would have

1 been sometime shortly before you left the plant, isn't
2 that right, at Saint Louis Park and moved to
3 Indianapolis?

4 A. That is correct.

5 Q. Were you involved in any way with discussions
6 pertaining to securing a U.S. Permit for the Saint
7 Louis Park facility?

8 A. I don't recall.

9 Q. So you may have been involved or you may not
10 have been involved but you don't recall whether you
11 were or not, is that right?

12 A. That is correct.

13 Q. There is some handwritten numbers and some
14 other handwriting on the three pages of this exhibit.
15 Can you identify the handwriting, whose handwriting it
16 would be, on the second page in the sixth and seventh
17 paragraph there?

18 A. Paragraph 6, I do not recognize that
19 handwriting.

20 Q. And Paragraph 7?

21 A. Paragraph 7 I am unable to even read portions
22 of it, I do not recognize that writing.

23 Q. And the handwriting in Paragraph 8?

24 A. The handwriting in Paragraph 8 may be mine.

25 Q. Do you believe that it's likely to be yours?

1 A. It appears very similar to my handwriting.

2 Q. Would the numbers written on the first page
3 in Paragraph 4 and continuing on to the second page,
4 would those be in your handwriting?

5 A. I am not sure.

6 Q. Did the facility in Saint Louis Park have a
7 state permit of any kind, do you know?

8 A. For what?

9 Q. For a storage permit or a discharge permit.

10 MS. COMSTOCK: During what period?

11 MR. COYNE: During the period 1969 to
12 1971?

13 A. I don't recall.

14 Q. You will note on Page 3 of this exhibit in
15 Paragraph 9 it identifies the State of Minnesota
16 Pollution Control Agency as the state agency
17 authorizing the discharge?

18 A. I note that.

19 Q. Do you have any reason to believe there was
20 such a permit at the time?

21 A. I have no recollection.

22 Q. Was there any other authorization by the
23 state for the discharge of waste material from the site
24 other than in a permit form?

25 A. I have no recollection.

1 Q. Who in the company would have information?

2 A. I don't know.

3 Q. The introductory two lines in the first page
4 refer Mr. Finch to Mr. Hennessy. What was Mr.
5 Hennessy's involvement with securing a federal permit?

6 A. At this particular point in time, as I recall,
7 the U.S. Army Corps of Engineers had been the agency
8 designated for discharge permits into navigable waters.
9 Mr. Hennessy had been assigned the task, at least it's
10 my understanding, of completing the U.S. Corps of
11 Engineer application forms for the plants that would
12 need one.

13 Q. So there were some plants that would need one
14 and some plants that would not, is that right?

15 A. That is correct.

16 Q. What would be the basis to distinguish
17 between those that would need one and those that would
18 not?

19 A. My understanding was that if you did not
20 discharge into a navigable waterway you did not need a
21 permit. The definition of a navigable waterway was
22 rather vague at that point in time also.

23 Q. Based on the fact that you believe that the
24 handwriting in Paragraph 8 may be yours, does that
25 refresh your recollection with regard to your

1 involvement in discussions with regard to obtaining a
2 federal permit?

3 A. No, it does not.

4 Q. Are you aware of any discussions with the
5 State of Minnesota with regard to obtaining a state
6 permit for authorization to discharge waste material?

7 A. I don't recall any.

8 Q. Any conversations with anyone else at the
9 company may have had -- are you aware of any such
10 conversations other than by yourself other than state
11 personnel?

12 A. I am not clear on your question at this point.

13 Q. As I understand, you are not aware of any
14 state permits being issued for the Saint Louis Park
15 facility, is that right?

16 A. That is correct.

17 Q. And you are not aware of any applications
18 made for such a state permit authorizing discharge?

19 A. I can't recall.

20 Q. So then you are not aware of anybody within
21 the company having any discussions with the State of
22 Minnesota with regard to obtaining a permit for
23 discharge?

24 A. I can think of no one.

25 Q. Are you aware of the fact that Reilly Tar,

1 subsequent to this memo, declined to make application
2 or decided not to make application for a federal permit
3 for this facility?

4 A. I believe the decision was made based on the
5 fact that we did not discharge to a navigable stream.

6 Q. What was the basis to reach that conclusion?

7 A. The effluent from our plant did not reach a
8 navigable stream.

9 Q. And is it your understanding that the water
10 ponded in that area between Walker Street and Highway 7
11 rather than discharging to a stream, is that your
12 understanding?

13 A. That is my understanding.

14 Q. Who would have participated in the
15 determination to proceed to make the application for a
16 federal permit?

17 A. I don't know.

18 Q. Mr. Justin, I have a series of questions
19 about water at the site and the use of water at the
20 site. What were the sources of the water that were
21 used at the site?

22 A. There was city water and I recall one well on
23 the site. That's the only sources I can think of.

24 Q. The well that you recall, and correct me if I
25 am wrong, was the well along side the refinery to the

1 south of the refinery indicated by an arrow and the
2 legend "Republic deep well"?

3 A. That is correct.

4 Q. The city water that you referenced was
5 brought onto the site by a water main, is that right?

6 A. Yes.

7 Q. And where would that main have been located
8 on the site?

9 A. I don't know.

10 Q. Do you know what the point of connection was
11 where the water was brought onto the site?

12 A. No, I do not.

13 Q. And you don't recall the condition of the
14 main as it passed through the site?

15 A. No, sir, I do not.

16 Q. There is indicated here on the map in the
17 legend, "water main and hydrant". Let's go off the
18 record for a minute.

19 (At this time a discussion was held off the
20 record.)

21 BY MR. COYNE:

22 Q. We can go back on the record and see if I can
23 get this correct. We have just looked at this exhibit
24 in an effort to establish where the water main and
25 hydrants were located on the site. There is a water

1 main shown on the map along the eastern edge of the
2 property extending northward to an area shown as the
3 untreated crosstie storage area and is it true that you
4 don't recall this water main and hydrant system
5 crossing through the untreated crosstie storage area?

6 A. That is correct.

7 Q. Is it also correct that you do recall fire
8 hydrants located in the general area south and west of
9 the refinery as indicated generally here on the map?

10 A. That's correct.

11 Q. And the source of water for the those
12 hydrants was city water, is that right?

13 A. That is correct.

14 Q. Do you recall any other hydrants in addition
15 to those hydrants shown south and west of the refinery?

16 A. You are speaking of fire hydrants?

17 Q. Right.

18 A. No, I do not.

19 Q. In addition to city water being provided to
20 hydrants, was city water provided to other locations or
21 other facilities at the plant?

22 A. I believe so.

23 Q. And what other places, what other facilities?

24 A. The office, and I am not sure of any other
25 areas. One correction to the boiler. City water was

1 supplied to the boiler..

2 Q. The boiler room is indicated as such and that
3 would have been in the area generally referred to as
4 the retort framing area, is that right, is that where
5 the boilers were located?

6 A. It was located in a building adjacent to the
7 treating room.

8 Q. As identified on the map as the boiler room
9 here?

10 A. That is correct.

11 Q. Any other uses of city water as best you can
12 recall?

13 A. I can't think of any others.

14 Q. Now, the remainder of the water consumed at
15 the plant site was drawn from the Republic deep well,
16 is that right?

17 A. That is correct. I might clarify that by
18 saying that that water was only used in the refinery
19 area.

20 Q. And which water was that?

21 A. From the Republic deep well.

22 Q. And what was the source of water at the
23 retort wood treating side of the plant, was that city
24 water and not water withdrawn from the Republic deep
25 well that was used in the wood treating operation?

1 A. I am not familiar with any use of water in
2 that area.

3 Q. Was the city water ever tested to evaluate
4 its suitability for use for the boiler, for example?

5 A. Water going into the boiler would have been
6 tested for hardness.

7 Q. Any other tests other than for hardness?

8 A. I can't think of any.

9 Q. Previous to the connection to city water, the
10 Republic deep well had supplied water to the boilers,
11 isn't that correct?

12 A. I have no knowledge of that.

13 Q. Do you believe that to have been the case
14 prior to the connection to the city water supply?

15 A. I don't know.

16 Q. Was the water withdrawn from the Republic
17 deep well tested?

18 MS. COMSTOCK: I am sorry, what period
19 of time?

20 BY MR. COYNE:

21 Q. In the period 1969 to 1971?

22 A. I can't recall.

23 Q. Do you have reason to believe it was ever
24 tested?

25 A. I have no reason to believe it was.

1 Q. Do you have any reason to believe that it was
2 tested in the period prior to 1969?

3 A. I have no knowledge or reason to know.

4 Q. Were there ever occasions in the period 1969
5 to 1971 when the Republic deep well was not in
6 production; that is, that there was some malfunction or
7 problem which resulted in the cessation of pumping from
8 that well?

9 A. Only if we had a pump failure or the motor
10 failed and it was out of service awaiting repair; but I
11 do not recall any specific incidents.

12 Q. Did that ever occur while you were there,
13 that is, that the pump failed?

14 A. That's what I was referring to in my previous
15 statement.

16 Q. So it did happen when you were there between '6
17 and '71?

18 A. I do not recall if it happened while I was
19 there.

20 Q. If it did happen would that replacement or
21 repair of the pump be yours as plant superintendent?

22 A. Yes, because I used the well and I would have
23 seen that it was repaired.

24 Q. And the best of your recollection is that
25 there was never a work stoppage in the refinery

1 attributable to a pump failure at the well?

2 A. That is correct.

3 Q. Was the pump in the well an oil lubricated
4 pump?

5 A. I don't know what type of pump it was.

6 Q. Was the well repaired or any maintenance done
7 on the well apart from the pump while you were there in
8 the period 1969 to 1971?

9 A. I don't recall any work having been done on
10 the well during my period at the plant.

11 Q. What was the amount of water, on a calendar
12 year basis, pumped from the Republic deep well?

13 A. I have no idea.

14 Q. Were the flows metered?

15 A. No.

16 Q. Was there ever any consideration made to
17 meter the flow?

18 A. I don't recall any.

19 Q. What was the odor, appearance or taste of the
20 water withdrawn from the Republic deep well?

21 A. I don't recall any particular odor or any
22 discoloration of the water coming out of the well. It
23 appeared to me to be good water. On several occasions
24 I even drank some of it there.

25 Q. Were there tar flecks or tar balls in the

1 water?

2 A. I never observed any.

3 Q. Was there ever an occasion, while you were
4 there in 1969 to 1971, when water was exposed of into
5 the well?

6 A. No.

7 Q. Do you have any reason to believe that water
8 was disposed of into the well at any other time?

9 A. I have no knowledge of water ever having been
10 disposed of into that well.

11 Q. Or reason to believe that that ever was done?

12 A. I have no reason to believe that it ever was
13 done.

14 Q. When you left the plant site in 1971 was the
15 well in production at that time?

16 A. I believe it was.

17 Q. And your reason to conclude that it was in
18 production?

19 A. I had been using the well the entire time I
20 was there and I don't recall any malfunction of the
21 well prior to my leaving.

22 Q. Describe the appearance of the housing for
23 the well. If you stood along side the well at that
24 time what would you see?

25 A. The only recollection I have is that the pump

1 or at least the motor itself was mounted on top of a
2 concrete pier and, as I recall, the concrete pier would
3 be approximately waste high and I would only be
4 guessing if I gave you the dimensions of that concrete
5 pier.

6 Q. In order to get access to the pump, assuming
7 a pump failure, what would need to be done?

8 A. I don't know.

9 Q. Could access be obtained without using some
10 heavy equipment?

11 A. I don't know.

12 Q. Do you have reason to believe that there were
13 ever any spills into that well?

14 A. I have no knowledge of any.

15 Q. Has there been any mention made of spills
16 into the well of which you are aware?

17 A. I can't think of any.

18 Q. Would it be possible for water from the
19 cooling water pond, and the cooling water pond is shown
20 on the mylar map and indicated as "pond", is there any
21 possibility of water from that pond flowing into the
22 Republic deep well?

23 A. I don't see how it could.

24 Q. And the reason for not being able to see how
25 it could would be what?

1 A. The fact that the top of the pump was sitting
2 on the concrete pier which was approximately waist high,
3 water never got that high in the plant.

4 Q. Did you ever have any conversation or do you
5 know of any other people at Reilly Tar who had
6 conversations with employees or representatives of the
7 Renner Well Company?

8 A. I know of none.

9 Q. Or Barr Engineering Company?

10 A. I have heard the name Barr Engineering
11 Company but beyond that I have no recollection.

12 Q. Do you know of any consultations made by
13 Reilly Tar and it's employees with companies or
14 individuals with regard to the maintenance or repair of
15 the well or the pump in the well?

16 A. I cannot recall any was.

17 Q. Was an inquiry ever made as to the quality of
18 water withdrawn by other commercial wells in the
19 vicinity of the Saint Louis Park facility?

20 A. Made by who?

21 Q. By you or anyone at Reilly Tar?

22 A. I can't recall of any.

23 Q. Do you believe there ever was an inquiry made?

24 A. I don't know.

25 Q. Do you believe the consultants for the

1 company ever made inquiry as to the quality of water
2 withdrawn from commercial wells in the area?

3 A. I know analysis have been made of commercial
4 wells in the area. I don't know by who or at whose
5 request.

6 Q. During what time period?

7 A. I can't think of a specific time period
8 because I am thinking of reports I have seen of
9 analysis on wells and these reports cover a large time
10 frame.

11 Q. A time frame which would include the '60's
12 and '70's?

13 A. I believe so.

14 Q. And these are analytic results that you have
15 seen?

16 A. Yes.

17 Q. And when did you see these analytic results?

18 A. They have been within the last few years.

19 Q. And what was the occasion for your reviewing
20 these analytic results?

21 A. They were given to me, and I am not clear on
22 the exact reason they were given to me. They may have
23 been as a result of wanting me to have some background
24 on what was going on because of my present position.

25 Q. Were they given to you by somebody within the

1 company?

2 A. Yes.

3 Q. And do you recall who that was?

4 A. Mr. Lesher has given me some copies of
5 analysis.

6 Q. Anyone else?

7 A. I can't recall anyone else at this time.

8 Q. Correct me if I am wrong, and that is looking
9 back to that time frame when you were in Saint Louis
10 Park, '69 to '71, is it true that as best you can
11 recall that during that time period there was no survey
12 or analysis of water supplied by commercial wells in
13 the area?

14 A. A survey by who?

15 Q. By Reilly Tar.

16 A. I don't recall that.

17 Q. Was there a survey of residential wells,
18 distinguishing residential wells from commercial wells?

19 A. I do not recall any.

20 Q. As best you can recall, you were not asked to
21 make such an inquiry or survey, is that right?

22 A. I don't remember being asked to do so.

23 Q. Apart from the time frame, '69 to '71, and
24 still focusing on residential wells, are you aware of
25 any survey made of the quality of water withdrawn from

1 residential wells in the area?

2 A. I can't think of any specific surveys.

3 Q. But in general do you believe that analytic
4 results were obtained for the water withdrawn from
5 residential wells in the area?

6 A. I don't know.

7 Q. I now have some questions about coal tar and
8 as I recall your testimony yesterday, when you were at
9 Granite City one of your tasks as plant chemist was to
10 determine whether coal tar met specifications at that
11 facility, is that right?

12 A. That is correct.

13 Q. Did you similarly have the responsibility at
14 Saint Louis Park to see that coal tar met
15 specifications?

16 A. Not personally but someone working under me
17 did.

18 Q. What specifications did the coal tar have to
19 meet?

20 A. We ran tests for moisture content, for
21 specific gravity, I believe that was basically the only
22 specifications that were in a contract and to that
23 extent the only specifications in the contract, I
24 believe, was only moisture.

25 Q. What would have been the specifications

1 pertaining to moisture?

2 A. I do not know.

3 Q. As a percentage of the total coal tar would
4 it be expressed as a percentage of the coal tar?

5 A. It would be expressed as a percentage of the
6 volume.

7 Q. Thank you. What would it be, that is, the
8 percentage of volume that would be contained in the
9 specifications in general?

10 A. I don't know.

11 Q. Would it have been 50 percent?

12 A. I don't know.

13 Q. So from the period '61 to '69, and again from
14 the period '69 to '71, so that's a decade, you were
15 responsible or those working for you were responsible
16 for determining whether or not the moisture content of
17 incoming coal tar met specifications, isn't that right?

18 A. We determined the percent of moisture and I
19 reported that percent. I don't recall at what cut off
20 I would reject the tar.

21 Q. What was the range of percentage of moisture
22 control expressed in terms of the volume of the coal
23 tar? What would be the range of percentage of moisture
24 content?

25 A. It could run from a trace to maybe even 100

1 percent if the supplier decided or accidentally filed a
2 car with water and sent it in to us and didn't know.

3 Q. Did that ever occur?

4 A. I don't recall of any incident.

5 Q. But you don't recall as a percentage of
6 moisture content whether it would be 1 percent, 10
7 percent, 20 percent or 30 percent, is that right, the
8 specifications of the company?

9 A. I don't know what the specifications were
10 that were written into the contract.

11 Q. Were the specifications routinely applied to
12 incoming coal tar?

13 A. I am not clear on that question.

14 Q. Well, in your previous answer you referred to
15 the moisture content contained in the contracts and I
16 am trying to move to a somewhat different question,
17 that is asking you whether or not you were generally
18 familiar, having been involved in determining whether
19 or not tar met specifications for a decade, what the
20 moisture content of the incoming tar would be, what the
21 customary or routine specifications would be for
22 incoming coal tar?

23 A. I don't know what the specifications would
24 have been.

25 Q. When the analysis were run what was the

1 amount of moisture actually found in incoming coal tar
2 in the normal course?

3 A. I don't recall how much moisture would be in
4 the tar. It may be, as I said, a trace to some upper
5 limit. I just don't recall how the test ran. We might
6 get 1 percent, 2 percent, 10 percent, 20 percent.

7 Q. And it was no more common, as best you can
8 recall, to find 1 or 2 percent or 20 percent?

9 A. Most of the tar you would expect to find may
10 be 2 percent or less.

11 Q. So the specifications were ordinarily in the
12 range of 1 to 2 percent?

13 A. Now you are speaking of specifications. I
14 don't know what the specifications were. I am telling
15 you what the test showed.

16 Q. That would be ordinarily 1 to 2 percent
17 moisture content, is that right?

18 A. My recollection is that would be the normal
19 range of the incoming tar.

20 Q. Would it most often be 2 percent than 1
21 percent?

22 A. I don't know.

23 Q. Would the moisture content vary depending
24 upon the source of the tar?

25 A. No.

1 Q. What would be the variable in terms of the
2 moisture content of the tar?

3 A. The variable?

4 Q. Well, some coal tar apparently had 1 percent
5 moisture content, some had 2 percent moisture content,
6 the question is why that variation between shipments?

7 A. Well, the same supplier might have a
8 variation from one truckload or one tank car to the
9 other and that would depend on the supplier's operation
10 to how he was separating the moisture from the tar at
11 his source.

12 Q. As a general proposition then, an individual
13 supplier would not routinely have a certain percentage
14 of moisture content as compared to another supplier who
15 would ordinarily have a different moisture content for
16 coal tar from that source?

17 A. That would be correct.

18 Q. What equipment did you use to determine
19 whether coal tar met specifications?

20 A. We used a hydrometer to check gravity,
21 although that was not necessarily part of a
22 specification, it was for our own purposes. The
23 moisture content, there is a special piece of flask
24 equipment called the moisture trap and you take a
25 sample of the tar, put it in a flask and a given volume

1 of tar and then you would add a given volume of benzene
2 or xylene and boil it, the water would come off with
3 the benzene or xylene, then it would be separated out
4 in the trap and you could see the moisture and read the
5 percentage of moisture.

6 Q. Were tar shipments ever rejected?

7 A. I can't think of any specific shipments that
8 would have been rejected.

9 Q. So then, if I understand you correctly, to
10 the best of your recollection and information there
11 never was a rejection of a tar shipment?

12 MS. COMSTOCK: When and where?

13 MR. COYNE: '69 and '71.

14 MS. COMSTOCK: At Saint Louis Park?

15 MR. COYNE: Yes.

16 A. I don't recall any.

17 Q. Was there ever a disposal of coal tar on the
18 site?

19 A. I know of none.

20 Q. And in the period of '69 or '71 or at any
21 other time?

22 A. Would have no reason to dispose of coal tar,
23 it was a product.

24 Q. In addition to coal tar coming onto the site
25 as a raw material for use in the refining process or

1 the wood treating process, were there other raw
2 materials brought onto the site?

3 A. Yes.

4 Q. And what were they?

5 A. There was a soft pitch brought onto the site.
6 There were creosote oil shipments brought onto the site
7 from other plants. That's all I can think of at this
8 time.

9 Q. How was the soft pitch transported to the
10 site?

11 A. By a tank car.

12 Q. The same way the coal tar was brought in?

13 A. The coal tar was brought in by truck and by
14 tank car and it was also brought in by barge, as far as
15 Savage, and then transported by truck from that point.

16 Q. As for soft pitch, it only came onto the site
17 by tank car, is that right?

18 A. That's the only way I recall it being brought
19 in.

20 Q. How was the creosote oil brought in?

21 A. By tank car.

22 Q. And what was its use?

23 A. We made inter plant transfers from other
24 plants and, as I recall, I brought creosote oil in to
25 blend with creosote oil that we produced in order to

1 meet specifications for oil that we sold.

2 Q. So this blending of creosote oil -- with
3 creosote oil produced by your refinery would be then to
4 produce an oil which was sold by Reilly Tar, is that
5 right?

6 A. That is correct.

7 Q. Was the blended oil ever used in the wood
8 treating operation as distinguished from being sold and
9 taken off site?

10 A. It could have been because we didn't
11 segregate our oils as to what went to the treating
12 plant or what went to a customer in common types.

13 Q. What was the soft pitch used for?

14 A. It was used as a blending material to blend
15 with hard pitch and the hard pitch then was sold as
16 anode pitch to the aluminum industry.

17 Q. This blending of soft pitch and hard pitch
18 would be done in the refinery, is that correct?

19 A. That is correct.

20 Q. Going back for a moment to the creosote oil
21 that was brought in for blending. How was that
22 creosote oil different from the creosote oil produced
23 by the refinery?

24 A. I brought in what we called -- I guess I
25 should correct that. I am not sure what the difference

1 would have been. There would have been a difference in
2 the distillation range in order to bring oil I may have
3 produced that was not within a correct distillation
4 range and bring it in. I believe there was some other
5 creosote oil brought in by railroad companies to be
6 used for treating purposes of their materials.

7 Q. So that creosote oil may have gone right into
8 the wood treating operation for treating some
9 particular customer's wood, is that that --

10 A. It would have gone into a common tank. Some
11 railroads supplied oil for treating of their railroad
12 ties and we just simply unloaded it into a common tank
13 and kept an inventory record of what they had brought
14 in against what they used.

15 Q. But that would be their tank, so to speak?

16 A. It would be their oil but not their tank.

17 Q. What was inside that tank would be theirs, is
18 that right?

19 A. Well, whatever the record shows they had
20 brought in.

21 Q. The creosote oil, as I recall you having said,
22 was sometimes used to correct creosote oil that had
23 been produced by the refinery, is that right? To some
24 extent was the creosote used to blend what was used in
25 the refinery up to some specifications, is that correct?

1 A. That would be correct.

2 Q. I would like to direct your attention for a
3 few minutes to the unloading of the trucks and the tank
4 cars and ask you whether this coal tar creosote oil
5 soft pitch was ever spilled during unloading operations?

6 A. From the time it was brought into the plant?

7 Q. That's correct.

8 MS. COMSTOCK: Can you give a date?

9 BY MR. COYNE:

10 Q. Let's again refer to that '69 to '71 time
11 period.

12 A. I can't recall any of it being spilled while
13 I was there.

14 Q. Do you have any reason to believe or any
15 recollection of reports made to you of any spills other
16 than in the time period '69 to '71, spills of incoming
17 material of any kind?

18 A. I know of none.

19 Q. When the tank cars came into this plant, was
20 the content of the tank cars heated in order to pump
21 the tank cars out?

22 A. Yes.

23 Q. How was that heating done?

24 A. There were steam coils in the tank cars, the
25 steam would be applied to coils.

1 Q. Were there also steam coils in the trucks or
2 steam coils only found in the tank cars?

3 A. Only in the tank cars.

4 Q. Would you describe how the steam coils worked,
5 that is, how the connection was made to the tank car
6 and what happened when the connection was made and so
7 forth?

8 A. The steam coils inside a tank car are what we
9 call internal or external depending on whether they are
10 inside the shell and in contact with the liquid or
11 whether they are on the outside of the inner shell and
12 not in contact with the liquid. Then there is an entry
13 and an exit coming through the bottom of the tank car,
14 you hook steam up to the inlet and you put a steam trap
15 on the outlet and apply the steam.

16 Q. Were most of the tank cars of the internal
17 steam coil type or the external steam coil type?

18 A. I don't know at that time.

19 Q. Today are they more often the internal rather
20 than the external or vice versa?

21 A. Today I believe most of ours are internal.
22 Now, when I say "internal" I mean they are not in
23 contact with the liquid in the tank car. The word
24 internal and external in this use is confusing.

25 Q. I am already confused. But as you used

1 internal for the time period '69 to '71, as I
2 understand, you were meaning that the liquid in the
3 tank car would be in contact with the steam coil, is
4 that right?

5 A. No, internal would mean that it was between
6 the inner shell and the outer shell of the tank car.
7 External would mean it was in contact with the liquid
8 within the tank car.

9 Q. I think what we ought to do is depart from
10 the use of the terms internal and external because I am
11 not sure I am ever going to get clear on that and
12 rather just refer to it as steam coils in contact with
13 the content of the tank car or not. Okay?

14 A. Okay.

15 Q. And the period '69 to '71 you are not clear
16 as to whether most often the tank cars had coils which
17 were in contact with the content or not, that's correct?

18 A. That is correct.

19 Q. Now, hopefully we are making some progress.
20 In the period in general prior to '69 to '71 were most
21 of the tank cars constructed so that the steam coils
22 were in contact with the content of the tank car?

23 A. I don't know.

24 Q. You mentioned an inlet and an outlet and that
25 the connection of the steam would be to the inlet, is

1 that right?

2 A. Yes.

3 Q. And you also mentioned a steam trap. What
4 was that?

5 A. Steam trap is designed to hold steam in a
6 steam coil in its saturated state and once condensation
7 occurs it releases the condensation but does not
8 release live steam.

9 Q. Where would the condensate flow once released?

10 A. It flowed into -- correct that. It flowed
11 out onto the ground.

12 Q. Was there a pathway for the flow? Did it
13 flow in one direction rather than another or simply
14 pond in that area?

15 A. It would follow the normal terrain.

16 Q. Which in this case would be in which
17 direction?

18 A. I really don't recall. I believe our flow
19 was in a general south to southwest direction.

20 Q. What volume of condensate per tank car would
21 there be?

22 A. I don't know.

23 Q. Would it be in terms of gallons?

24 A. Yes.

25 Q. More than five gallons per tank car would you

1 say?

2 A. More than five gallons, yes.

3 Q. More than 10?

4 A. I don't know. I don't know where the cutoff
5 point would be. It would depend on how long you heated
6 the tank car, to what temperature you heated it.

7 Q. In the normal course of day-to-day activities
8 what would the range of volume be?

9 A. I don't know.

10 Q. Something more than five gallons as a matter
11 of general course --

12 A. Something more than five gallons but beyond
13 that I don't know.

14 Q. How many tank cars on the average were
15 unloaded per day?

16 A. I don't know what an average would be.

17 Q. Well, say the average week, would you unload
18 1,000 tank cars or 10?

19 MS. COMSTOCK: Is this per week or per
20 day now total?

21 MR. POLACK: Total cars, is that what
22 you are asking, total tank cars?

23 BY MR. COYNE:

24 Q. How many tank cars were unloaded on the
25 average per week at the Reilly Tar facility at Saint

1 Louis Park in the period 1969 to 1971?

2 A. I don't know.

3 Q. Would it have been 1,000 or 100? What would
4 be the range?

5 A. The lower range would be zero, I don't know
6 what the upper range would be. It would not exceed --
7 well, it wouldn't exceed 100. I have no recollection
8 of how many we might unload as a maximum.

9 MR. POLACK: Can we come to a stopping
10 point here in view of the lunch hour?

11 MR. COYNE: Well, Rob, as you know we
12 are running late and we do want to make what progress
13 we can. I would like to complete those. They are only
14 a few in number and would ask that we do that before we
15 take a break.

16 MS. COMSTOCK: Five to ten minutes?

17 MR. COYNE: I think so.

18 BY MR. COYNE:

19 Q. What was the volume of tar or soft pitch in
20 the tank cars? What was the capacity of the tank cars?

21 A. Of the soft pitch?

22 Q. Of the soft pitch.

23 A. They were 10,000 gallon cars.

24 Q. For the coal tar?

25 A. They would have been 10,000 gallon tank cars

1 at that point in time.

2 Q. The tank trucks, what was the capacity of the
3 tank trucks?

4 A. I don't recall.

5 Q. In general would it have exceeded the volume
6 of the tank cars?

7 A. No, the tank trucks were smaller than the
8 tank cars.

9 Q. Were the tank cars or the tank trucks cleaned
10 at the Saint Louis Park facility in the time frame '69
11 to '71 again?

12 A. What tank cars are you referring to?

13 Q. Well, was there ever an occasion to clean a
14 tank car or clean a tank truck or were they cleaned at
15 some other location off site?

16 A. There was an occasion to clean tank cars.

17 Q. What was the occasion or what would prompt
18 that action?

19 A. These were our pitch tank cars that we
20 transported the anode pitch in.

21 Q. Would those routinely be cleaned at the Saint
22 Louis Park facility?

23 A. We cleaned pitch -- tank cars containing
24 anode pitch on several occasions but I don't remember
25 how many we cleaned.

1 Q. What would prompt the cleaning of a tank car
2 containing the anode pitch?

3 A. Over a period of time materials tend to
4 settle out of the pitch or maybe the customer wouldn't
5 heat them hot enough before they unloaded them and this
6 would cause material to build up in the bottom of the
7 car and over a period of time this heavy material that
8 settled would build up above the internal heating coils
9 on these cars and we would have to remove it in order
10 to bring the efficiency of the coils back up to an
11 acceptable level.

12 Q. How was that removal done?

13 A. By jack hammers and shovel.

14 Q. With the use of water as well?

15 A. No.

16 Q. The residue from the tank car, what was its
17 disposition?

18 A. I don't know where it went.

19 Q. Would it have been left on site?

20 A. I don't know.

21 Q. Whose responsibility was it to oversee the
22 unloading and cleaning of the tank cars?

23 A. The person that handled that was my foreman.

24 Q. Who in turn reported to you?

25 A. Yes.

1 Q. So it was ultimately your responsibility as I
2 understand then?

3 A. Ultimately the responsibility would be mine
4 to determine when to clean.

5 Q. Was hot oil used in the cleaning process?

6 A. No.

7 Q. The residue from the tank car that was
8 removed, was it always in solid form then rather than
9 in liquid form?

10 A. Solid. It was a very hard material.

11 Q. This cleaning then of the tank cars was
12 always associated with incoming pitch as distinguished
13 from coal tar?

14 A. Not incoming pitch. This was residue that
15 built up in the cars that we used to ship pitch to a
16 customer.

17 Q. Oh, outgoing then?

18 A. Outgoing.

19 Q. You didn't have to clean cars -- well, you
20 didn't ship coal tar out, did you, or did you?

21 A. I don't recall shipping any coal tar out.

22 Q. The tar cistern was used to contain the coal
23 tar that was brought onto the site, isn't that correct?

24 A. That is correct.

25 Q. And some tanks were also used for that

1 purpose, isn't that right?

2 A. That is correct.

3 Q. At the time that you were there, 1969 to 1971,
4 what was the condition of the tar cistern?

5 A. What do you mean by "condition"?

6 Q. What was its appearance? What was its state
7 of repair?

8 A. To the best of my knowledge the walls and the
9 bottom were in good shape, the roof was deteriorating.

10 Q. What was the condition of the coils in the
11 tar cistern?

12 A. Those were bayonette heaters and as far as I
13 know they were in good condition.

14 Q. The roof was in poor condition but still
15 standing at the time, is that right?

16 A. Yes.

17 Q. Did precipitation enter the tar cistern?

18 A. Yes.

19 Q. Did runoff from the plant site enter the tar
20 cistern, storm water enter the tar cistern?

21 A. I don't know but I don't believe so.

22 Q. What was the basis for your believe that that
23 did not happen?

24 A. Because of the elevation of the walls.

25 Q. Which were approximately?

1 A. Above ground.

2 Q. How high did the walls extend above ground?

3 A. I don't recall.

4 Q. Would it have been waist high?

5 A. Somewhere between -- it would have been below
6 waist high.

7 Q. Knee height?

8 A. I don't know.

9 Q. Was water ever decanted or taken off the
10 surface of the coal tar and the tar cistern?

11 A. Yes, it would have been.

12 Q. How was that done?

13 A. It would have been pumped off.

14 Q. Was this a routine practice?

15 A. Routine to the point that when it reached a
16 certain accumulation we would pump it off, not routine
17 to the point that we did it weekly or daily or monthly
18 on a set basis.

19 Q. How often do you think that that occurred,
20 that is, that it was pumped? Would it have been once a
21 year or once a week or a regular routine?

22 A. I have no recollection how often it was
23 pumped off.

24 Q. Several times a year at least?

25 A. I don't know.

1 Q. Where did the water drain that was pumped out
2 of the tar cistern?

3 A. I don't know where the discharge was from the
4 pump.

5 Q. Did it flow over the surface of the ground or
6 into a ditch?

7 A. It didn't flow over the surface of the ground,
8 it was being pumped somewhere but I do not recall where.

9 Q. Do you know where ultimately that flow would
10 have gone, that is, for example, that settling basin or
11 some other point on the property?

12 A. I don't know.

13 MR. COYNE: Thank you, Mr. Justin. I
14 think we should have some lunch.

15 THE WITNESS: Okay.

16 (At this time a recess was held.)

17 BY MR. COYNE:

18 Q. Were the storage facilities, the tanks at the
19 facilities, heated?

20 A. Yes.

21 Q. What method of heating was used?

22 A. Steam coils and that was it, steam coils.

23 Q. What was the source of the steam that was
24 used?

25 A. From the plant boiler.

1 Q. What was the condition of the steam coils?

2 A. They were all in good condition to the best
3 of my knowledge.

4 Q. Was the steam condensate recycled to the
5 boilers?

6 A. No.

7 Q. What happened to the steam condensate?

8 A. When I first got there it discharged onto the
9 ground. During the time that I was there I started
10 installing a collection system so that I could channel
11 it into a collection system and discharge it at one
12 given point.

13 Q. That collection system was a ditch, was it?

14 A. The collection system with a pipe that I
15 installed.

16 Q. And the pipe ran from what point to what
17 point?

18 A. The one pipe that I recall ran between the
19 tanker unloading shed and the tar cistern.

20 Q. What was the volume of water that passed
21 through this line?

22 A. I have no idea.

23 Q. Did the pipe that you constructed connect
24 with the waste stream from the plant site?

25 A. Yes, it would have.

1 Q. What was the reason that the steam condensate
2 was not recycled to the boilers?

3 A. I really don't know. That was an engineering
4 decision.

5 Q. Was that water suitable for use in the
6 boilers?

7 A. It would have been.

8 Q. Did you confer with engineering when the
9 decision was made to pipe this flow to the waste stream
10 rather than recycling it to the boilers?

11 A. No.

12 Q. What was the basis for your decision to
13 discharge that water rather than recycle it to the
14 boilers?

15 A. That was just common corporate policy that we
16 did not recycle any of our steam into the boilers. I
17 do not know their reason for that decision.

18 Q. Was that a practice, as far as you are aware,
19 that was true for all the Reilly Tar facilities?

20 A. Yes.

21 Q. Does that remain the case today?

22 A. Yes.

23 Q. But you are not aware of the reason for that,
24 is that right?

25 A. No.

1 Q. No, you are not aware of the reason?

2 A. I am not aware of the reason.

3 Q. Was a monthly proof of inventory conducted
4 during the period while you were at the site?

5 A. Yes.

6 Q. And what was the purpose of doing that?

7 A. Proof of inventory was for, I assume,
8 internal economic control to show a balance of
9 materials and to have a control on the material use and
10 disposition of the finished product.

11 Q. Is that still done today?

12 A. Yes.

13 Q. What did the monthly proof of inventory show
14 for the Saint Louis Park facility?

15 A. It would show the amount of incoming raw
16 materials, their disposition as to what product they
17 went into, then it would show the amount of product
18 produced from the distillation operation. It would
19 show where the final product went. It was usually
20 broken down into pitch and creosote and the pitch on
21 the proof of inventory would be indicated by customer
22 as to the amount that was shipped and the creosote oil
23 also would be shown as to the amount shipped and
24 customer.

25 Q. Was there a discrepancy between the material

1 in and the material out of the site?

2 A. There would also be some discrepancy.

3 Q. And what was the range of the discrepancy?

4 MS. COMSTOCK: Again, Dennis, we are
5 talking about '69 to '71?

6 MR. COYNE: Right.

7 A. I don't recall what the range would be.

8 Q. Did you review the monthly proofs of
9 inventory?

10 A. Yes.

11 Q. Was that part of your job responsibility as
12 plant superintendent?

13 A. Yes, it was.

14 Q. What was the range of the discrepancy on the
15 monthly proofs of inventory during that period, '69
16 to '71?

17 A. I don't recall what the range would be.

18 Q. The range would have been in the several
19 percent or would it have been 30 or 40 percent? What
20 would --

21 A. I never thought of a range as a percentage on
22 the proof. The difference was always in gallons,
23 either gained or lost.

24 Q. What would be the range of gallons gained or
25 lost?

1 A. That figure I can't recall.

2 Q. Do you review monthly proofs of inventories
3 for facilities in your current position at Reilly Tar?

4 A. No, I do not.

5 Q. Do you have any idea what the range is in
6 monthly proofs of inventories during this current
7 period at facilities operated by Reilly Tar?

8 A. You are speaking of the present time?

9 Q. I am.

10 A. No, sir, I do not.

11 Q. What part of the discrepancy shown on monthly
12 proofs of inventory would be attributable to ruptures,
13 leaks and spills at the facility?

14 A. I would say no.

15 Q. Would the ruptures, leaks and spills then not
16 appear in the discrepancy shown, is that what you are
17 saying?

18 A. As I understand the question you are asking
19 me if the discrepancy would be the result of a rupture,
20 leak or spill and my answer to that was not to my
21 knowledge.

22 Q. What is the basis for the discrepancy?

23 A. I don't know. In doing proof of inventory
24 there are certain factors that were given me to use; in
25 other words, if you produce so many tons of pitch you

1 used a factor and this supposedly told you how many
2 gallons of tar it would take to produce that many tons
3 of pitch. I questioned the accuracy of this conversion
4 factor.

5 There are other factors that would enter into
6 this in the inaccuracy of measuring tanks. When you
7 consider a tank 30 -- 40 feet in diameter and you are
8 reading a gauge from the ground that's gauged in inches,
9 if you misread that a quarter of an inch you could be
10 off a considerable amount of gallonage and that could
11 account for a variation.

12 Q. It's your testimony then that the monthly
13 proofs of inventory were not used as an indicator of
14 loss of product through ruptures, leaks, spills or
15 other losses on site?

16 A. I was never able to account for a loss as a
17 result of ruptures, spills or leaks. Obviously when I
18 had a loss I tried to find out why I had a loss and
19 this would be one of the first things you would suspect.
20 I could never find a source of leakage or rupture or
21 spills that could account for these losses.

22 Q. Were there ruptures, leaks or spills during
23 the time when you were at the site?

24 A. I recall one spill that I had while I was at
25 the site.

1 Q. And only that one spill, is that right?

2 A. Pardon?

3 Q. And only one spill, is that right?

4 A. That's the only spill I recall.

5 Q. And what were the circumstances?

6 A. We had loaded a creosote car for shipment.

7 The quality control check on the material showed that
8 the material was not in specifications. This meant it
9 was necessary to reload the car. When the operator
10 removed the cap from the boot to hook up the unloading
11 hose the contents started spilling on the ground and it
12 was later determined that the internal valve on the car
13 was inoperative and we could not close it.

14 Q. Then what happened?

15 A. The car continued to empty on the ground. We
16 diked the area around it and channeled it into that
17 trench that we earlier discussed between the tanker
18 unloading shed and the tar cistern. That drains to an
19 area where we were able to pump the material out and
20 pump it back into storage.

21 Q. What percentage of the volume lost did you
22 then recover?

23 A. I do not recall how much we recovered.

24 Q. What happened to the percentage or part that
25 was not recovered?

1 A. I would assume it either remained in that
2 ditch or was pumped through the system and out through
3 the straw filter. It would have been picked up at the
4 straw filter at that point.

5 Q. Are you saying that you pumped from that
6 ditch, referring to that ditch between that tar
7 unloading shed and the tar cistern, to storage and you
8 also pumped from that ditch into the settling basin?

9 A. We could, yes.

10 Q. Is that what happened?

11 A. That's what happened.

12 Q. Why did you pump some to storage and some to
13 waste?

14 A. I pumped all to storage that I could reclaim.
15 I pumped until all I was getting was water.

16 Q. How is it that you were able to pump and then
17 later only recover water? Did the creosote separate
18 out as water and creosote and you recovered all the
19 creosote and all that remained was water, is that the
20 chemistry involved there?

21 A. Creosote oil will settle to the bottom. It's
22 heavier than water so the intake of our pump would be
23 at the bottom most point of the sump area and we pumped
24 until all we were getting was water.

25 Q. At that point you diverted that water into

1 the settling basin, is that right?

2 A. From that time on any pumping that was done
3 in that area would have gone to the settling basin.

4 Q. How much time transpired between the emptying
5 of the tank car and the completion of the recovery
6 effort?

7 A. I am not sure but it would have been before
8 the next morning.

9 Q. And the incident occurred when, at night?

10 A. Shortly before noon.

11 Q. So the recovery effort was from noon of one
12 day until the morning of the next and by morning you
13 mean day light hours?

14 A. It would have been prior to that. I am
15 saying it would not have gone past that point. We may
16 have completed it by sundown that night, I don't know.

17 Q. Would it be fair to say that the recovery
18 effort was accomplished in six to 10 hours after the
19 spill, to the best of your recollection?

20 A. I would say that would be fair and it would
21 be possible to have done it.

22 Q. What is the estimate of creosote loss from
23 the tank car?

24 A. I don't know what the estimate was at that
25 point.

1 Q. Was the tank car filled at the time of the
2 incident?

3 A. Yes, it was.

4 Q. Did it empty?

5 A. Yes, it did.

6 Q. What was the volume of the tank car?

7 A. It was a 10,000 gallon tank car.

8 Q. Is it fair to assume that the loss of
9 creosote was approximately 10,000 gallons?

10 A. No, the lost would not have been 10,000
11 because we recovered the big percentage of it.

12 Q. But the lost from the tank car was
13 approximately 10,000 gallons?

14 A. It would have been between 9,000 and 10,000
15 gallons.

16 Q. What do you estimate the volume of material
17 recovered to the storage tank of that 9,000 to 10,000
18 gallons spilled?

19 A. I don't know how much we recovered.

20 Q. When did that incident occur?

21 A. I recall it was in the summer time but I
22 don't recall which summer that I was there, whether it
23 was the first summer or the second summer.

24 Q. 1970 or 1971?

25 A. Yes.

1 Q. Was the incident reported, do you know,
2 either to the city, the state or the federal
3 governments?

4 A. Not to my knowledge.

5 Q. Would you expect to have knowledge if that
6 was done?

7 A. Yes, I probably would have.

8 Q. Other than this one spill incident, were
9 there other occasions when tanks ruptured or tank cars
10 ruptured?

11 A. During the period I was at the plant?

12 Q. That's correct.

13 A. I recall having a still rupture.

14 Q. When did that occur?

15 A. That I do not remember.

16 Q. During your period of '69 to '71 though, is
17 that correct?

18 A. That's correct.

19 Q. What was the circumstance of that tank
20 rupture or still rupture rather?

21 A. I don't remember what caused the still to
22 rupture. It was during the firing of the still when it
23 ruptured.

24 Q. And then what happened?

25 A. Well, the material drained out onto the floor

1 and solidified and we were able to pick it up and
2 dispose of it.

3 Q. What disposal was made to this material?

4 A. You mean where did it go?

5 Q. Right.

6 A. I do not recall.

7 Q. Was there a practice as to the disposition of
8 material that was spilled or wasted in this manner?

9 A. A formal practice you are asking me.

10 Q. A formal practice, an informal practice, an
11 ordinary course of action taken?

12 A. As I recall, my men would clean the material
13 up and Ward Barton always arranged to have it disposed
14 of.

15 Q. Was that disposal on site or off site?

16 A. I don't know.

17 Q. Would you believe it to be on site or off
18 site? Are you aware of any information whatsoever
19 which would indicate disposal on site or off site?

20 A. No, I just don't recall where the material
21 was disposed of because material was disposed of off
22 site I know and I can't recall anybody going somewhere
23 and digging a hole and throwing the material in and
24 covering it up.

25 Q. But that could have occurred or may not have

1 occurred, you just don't know, is that right?

2 A. I don't think it could have occurred without
3 my knowledge and I don't recall it happening.

4 Q. So are you saying that to the best of your
5 information there was no on site disposal of waste
6 material during the period '69 to '71?

7 A. From the refinery, yes, there would be no on
8 site disposal.

9 Q. Of any other aspect of the operation?

10 A. I can't say about the treating plant, I
11 rarely was ever in the treating plant area.

12 Q. Why is it that you would know if there was
13 any disposal on site of refinery wasters?

14 A. It was my material and I would probably be
15 curious.

16 Q. And yet you don't know what the disposition
17 of that material that was lost was due to that still
18 rupture in the refinery?

19 A. I don't know where it went to, no, sir.

20 Q. In addition to that single still rupture
21 incident that you just described, were there any other
22 still ruptures during the period '69 to '71?

23 A. I recall a fire tube rupture.

24 Q. When was that?

25 A. I don't know the date.

1 Q. What happened?

2 A. A fire tube ruptured and at this point we had
3 just started to fire the still. As a result the tar in
4 the still was running out of the fire tube and I had
5 designed a system to handle just such an event should
6 it occur. Rather than have a solid pipe connection for
7 the air supply going to the burner, I had a flexible
8 rubber hose section approximately six -- eight inches
9 long. The hot tar coming out would melt this section
10 and we were able to then stick a trough under that and
11 start collecting the tar that was running out and we
12 could collect this in drums and at the same time we
13 were able to start pumping the still off and pump the
14 tar back to storage.

15 Q. What volume of material was lost at this time
16 or were you able to recover all the material?

17 A. I don't know what volume would have been lost,
18 probably 99 percent of it would have been saved.

19 Q. Would that part of it that was lost enter the
20 wastewater system or would it go some place else?

21 A. No, it was contained within the still
22 building where we were able to mix sand with it and
23 clean it up.

24 Q. And then once the sand had been mixed with it
25 what was the ultimate disposition of the sand and tar

1 mixture?

2 A. It was probably hauled off site or we may
3 have used it to make roads with. It would make a good
4 road.

5 Q. But in any event you don't believe that it
6 was disposed of on site, is that right?

7 A. To the best of my knowledge it would not have
8 been.

9 Q. Apart from the fire tube rupture and the
10 still rupture, any other ruptures of facilities
11 including tanks?

12 A. I can't recall any others.

13 Q. Do you have any information or reason to
14 believe there were other ruptures in the period prior
15 to 1969?

16 A. I have no knowledge of any.

17 Q. Do you have any reason to believe there were
18 any ruptures of stills, fire tubes, tanks?

19 A. From time to time you always have an
20 occasional rupture of a fire tube, this is just a
21 normal course of events, it happens.

22 Q. So you would expect there to have been other
23 fire tube ruptures. In addition to those would you
24 expect there to have been other still ruptures?

25 A. There is always the possibility that a still

1 can rupture. I have no knowledge of any other still
2 ruptures.

3 Q. In addition to the spill from the tank car
4 that you testified about, do you have any information
5 to believe there were other spills from tank cars,
6 tanks or other facilities in the period prior to 1969?

7 A. I have no knowledge of any.

8 Q. Do you have any information of any such
9 occurrences? Are you aware of any information?

10 A. Not that I can think of.

11 Q. If you were to refresh your recollection in
12 this regard what would you do? How would you refresh
13 your recollection?

14 A. I guess I would have to go through all plants
15 records and correspondence to see if there were
16 reference to any.

17 Q. But you have seen no such correspondence or
18 records that would indicate that?

19 A. I can't think of any.

20 Q. Going back to the monthly proofs of inventory,
21 how did the monthly proofs of inventory for the Reilly
22 Tar facility at Saint Louis Park compare to those at
23 Granite City?

24 A. It was very similar.

25 Q. Would you say they were comparable?

1 A. Yes.

2 Q. And to other facilities other than the
3 Granite City facility, comparing the Reilly Tar at
4 Saint Louis Park to other facilities operated at that
5 time by Reilly Tar?

6 A. I have no knowledge of the other proofs.

7 Q. Did water ever separate from tar during
8 storage?

9 A. Yes.

10 Q. What was done with this water?

11 A. It would be decanted and the decantation
12 would have gone through the tile system and out through
13 the straw filter.

14 Q. How would the decanting be done?

15 A. I don't recall exactly how we did it, whether
16 we pumped it off or whether we had pipes with various
17 levels of taps on them in which we could decant it.

18 Q. Was the tar cistern ever cleaned out in the
19 period '69 to '71?

20 A. Partially.

21 Q. And what were the circumstances?

22 A. The settlings were beginning to build up in
23 the tar cistern reducing its usable volume. I started
24 a procedure for cleaning up the cistern by using steam
25 and stirring up the settlings with the existing tar,

1 pumping this off to a storage tank and then moving that
2 through the system and using it as usable material.

3 Q. So the steam would be used to aggitate the
4 settling, is that right?

5 A. I was using that to aggitate with, yes.

6 Q. What was done with the residue that was moved
7 from the tar cistern?

8 A. That residue was moved through the system and
9 ended up in the final product.

10 Q. What became of the steam condensate or water
11 that was used in this process?

12 A. That would have gone to the surface of the
13 cistern and been pumped off in the normal manner.

14 Q. And the normal manner was?

15 A. To remove it through our discharge system.

16 Q. Were the storage tanks ever cleaned?

17 A. During the period that I was there?

18 Q. That's correct.

19 A. No.

20 Q. All right. Prior to your coming?

21 A. I believe one or two tanks had been cleaned
22 prior to my coming.

23 Q. Why would the tanks be cleaned?

24 A. The settling from the tar had built up in the
25 tanks and again was depleting the usable storage area.

1 Q. What became of the settling that was removed?

2 A. I don't know.

3 Q. When would that have occurred, the removal of
4 the settling?

5 A. It was prior to my going to the plant but I
6 don't know how prior or when.

7 Q. What's the basis for your information on this
8 point?

9 A. I was told by one of my employees, I believe
10 Monroe Brown, that the tanks had been cleaned.

11 Q. What else did he tell you about the incident?

12 A. He just told me how they did it, by cutting a
13 hole in the side of the tank and going in with a
14 frontend loader and removing the material that way and
15 then rewelding the section back into the tank.

16 Q. Do you know when Mr. Monroe Brown worked for
17 the company? He was there when you were there in '69
18 to '71?

19 A. Monroe Brown was either a 49 or a 50 year
20 employee. He left the plant when it closed. He was
21 the last man to leave the plant. So if you work back
22 50 years you would come up with a time frame as to when
23 he went to work for the company.

24 Q. So steam was not used, to the best of your
25 information, to clean tanks then?

1 A. No.

2 Q. The pipes which previously had been located
3 below ground in the areas south and west of the
4 refinery were moved to a location above the ground, is
5 that right?

6 A. That is correct.

7 Q. That was done prior to your coming to the
8 site, was it?

9 A. Yes.

10 Q. Approximately when before coming to the site
11 would you say?

12 A. I believe it was within one to two years.

13 Q. So likely the period '67 to '69?

14 A. That would be my estimate.

15 Q. Were all lines then at that point when you
16 came to the site in '69 above ground?

17 A. To the best of my knowledge they were.

18 Q. Approximately what height or distance above
19 the surface of the ground were the pipes?

20 A. There were some that were approximately 18
21 inches above ground. Others may be as high as 30 feet
22 above ground.

23 Q. Which were 18 inches and which were 30 feet?

24 A. There was a row of pipes 18 inches above the
25 ground that ran just southwest of the road that came

1 into the plant and went to the office, they ran along
2 the tank farm area to the northwest then they went
3 under the main plant road and ran northeast to the
4 refinery.

5 Q. The tank farm area is the area shown to the
6 south and west of the refinery with the tank numbers 1
7 through 9, is that correct?

8 A. That is correct.

9 Q. The 30 feet above the ground lines were
10 located where?

11 A. Those would be located at various tanks,
12 pitch tanks. We had three vertical tanks just
13 southwest of the refinery which I do not see on your
14 map. They were new tanks.

15 Q. Where were they located, under the roof of
16 refinery, to the south and west? That's indicated as
17 an underground creosote oil tank area and it is your
18 testimony that the tanks during your tenure at the
19 plant site, '69 to '71, were not underground there but
20 above ground, is that correct?

21 A. That is correct.

22 Q. How many tanks were there that were above
23 ground?

24 A. I believe there were three at that location.

25 Q. And their use?

1 A. One was a horizontal fuel oil tank and the
2 other two were for the distillate coming off of the
3 stills. One of them would have been what we call the
4 first cut, which would contain mostly water, and the
5 other one would contain the creosote oil.

6 Q. Were there lines that carry product from the
7 refinery to the wood treating operation?

8 A. There was one line.

9 Q. And was that line above ground?

10 A. Yes, it was.

11 Q. What distance above ground?

12 A. The best that I recall is that it would be
13 approximately 18 inches above the ground.

14 Q. You mentioned a first cut tank, was that a
15 tank that was installed during your tenure at the plant
16 site?

17 A. No, that was one of the new tanks that was
18 there when I arrived.

19 Q. And would you describe its purpose or
20 function?

21 A. Well, during the distillation process we have
22 what we call cuts, first cut, middle cut, heavy cut and
23 you pump the material during these fractions to
24 different tanks. This particular tank received the
25 first distillate coming off.

1 Q. That would be a cut other than the wet cut,
2 isn't that right?

3 A. No, that would include the wet cut or what I
4 would call the wet cut.

5 Q. So if I understand you correctly then, the
6 wet cut from the refining operation during your tenure
7 would go into this first cut tank?

8 A. Yes.

9 Q. Then where would it flow from there?

10 A. The water would be decanted off and would
11 have gone through the system.

12 Q. By that you mean the drain system?

13 A. Yes.

14 Q. All right.

15 A. The oil that settled out then would be pumped
16 to storage and blended into final product.

17 Q. When was this wet cut or first cut tank first
18 put into use?

19 A. I don't know. It was there when I arrived.

20 Q. But it was a relatively new tank you said?

21 A. Yes.

22 Q. Would you expect it to have been installed
23 within the five years prior to your coming to the site?

24 A. That would be my estimate.

25 Q. Before that time do you know if there was

1 another tank that would provide that settling or
2 provide that function for the wet cut?

3 A. No, I do not.

4 Q. You don't know?

5 A. I don't know.

6 Q. Were the pipes heated?

7 A. If you mean were they steam traced or wrapped
8 with some type of electrical heating, no.

9 Q. How were they heated?

10 A. They were not.

11 Q. So none of the pipes at that time, '69 to '71,
12 were heated then, is that right?

13 A. No, there were some pipes that were heated
14 but not the ones that we have been discussing.

15 Q. Which ones were heated?

16 A. There were some pitch lines that were heated.

17 Q. How were they heated?

18 A. Electrically by induction heat.

19 Q. So that steam lines were no longer in use to
20 heat pitch lines then at the time you were at the plant
21 site?

22 A. If you mean were there stream tracings, is
23 that what you are referring to?

24 Q. Frankly, I don't know the distinction between
25 steam tracings and steam lines. Perhaps you can

1 explain that distinction for me and then we can proceed
2 from there?

3 A. When I think steam tracing I am thinking of a
4 small pipe running on the outside of the pipe next to
5 it and as you run steam through it transmit the steam
6 through the pipe. That's what I refer to as steam
7 tracing or it may be wrapped around the pipe externally
8 and -- bypassing steam through the outside coil,
9 transmit the steam in to heat the pipe.

10 Q. So what were used during this period, '69 to '7
11 were these steam tracing lines, is that right?

12 A. No, there were no steam tracing lines other
13 pipes. The only pipes that were heated externally or
14 with any type of tracing were the pitch lines.

15 MR. COYNE: Would you read back that
16 answer?

17 (Whereupon the requested portion of the
18 record was read by the Court Reporter.)

19 BY MR. COYNE:

20 Q. My confusion is your mention of heating with
21 tracing. I don't understand. I thought you said there
22 were no steam tracing lines or no steam tracing done of
23 any lines at Saint Louis Park, period, is that correct?

24 A. That's correct.

25 Q. The only lines that were heated were the

1 pitch lines?

2 A. Yes.

3 Q. And the way they were heated was electrically?

4 A. Yes.

5 Q. I think that's progress. Why were the lines
6 brought above ground?

7 A. If I gave you a reason it would only be a
8 supposition. I have no information as to why they made
9 the decision to bring them above ground.

10 Q. What is your understanding of why that was
11 done?

12 A. For ease of maintenance.

13 Q. How would pipes be tested or evaluated? Were
14 there testing methods that were employed or not?

15 A. Do you mean on a routine basis?

16 Q. Yes.

17 A. There was no procedure for testing lines.

18 Q. How would one detect a leak?

19 A. Visually.

20 Q. What was the procedure when there was a leak,
21 what was done?

22 A. It would be repaired.

23 Q. What would be done with regard to the
24 material that had been lost during the leak?

25 A. During my period at the plant?

1 Q. During your period at the plant.

2 A. It would have been absorbed with sand or
3 cinders or some type of absorbant and then removed.

4 Q. Was this always done, that is, the absorption
5 and removal of the material?

6 A. During my period at the plant?

7 Q. During your period at the plant.

8 A. To the best of my knowledge.

9 Q. What became of the material then after it had
10 been removed, where did it go?

11 A. I don't know where it was taken.

12 Q. Prior to your tenure at the plant what was
13 done with regard to spills or lakes? Was there a
14 similar practice?

15 A. I don't know.

16 Q. Do you have any reason to believe it was done
17 as you have described it, done during your period or in
18 some other manner?

19 A. I don't know.

20 Q. The Reilly Tar Company has provided the State
21 of Minnesota some flow sheets in response to
22 interrogatories by the State of Minnesota. Have you
23 had occasion to see the flow sheet that I am showing
24 you which is Appendix D of these answers?

25 MR. COYNE: Off the record.

1 (At this time a discussion was held off the
2 record.)

3 BY MR. COYNE:

4 Q. Now, showing you the Appendix D, which is
5 entitled "Reilly Tar & Chemical Corporation Saint Louis
6 Park Tar Refinery Operations and Equipment Flow Sheets,
7 1960's," it's indicated as having a date of August 10,
8 1979 and there is some symbol above that, do you know
9 what that is? Is that someone's initials? I
10 understand Mr. Leshar said those were his initials.

11 A. I don't know those initials, whose they are.

12 Q. Have you ever seen this flow sheet or
13 participated in its preparation?

14 A. I have seen this flow sheet.

15 Q. And what were the circumstances when you saw
16 the flow sheet?

17 A. I don't recall. It's been some time ago.

18 Q. Did you confer in its preparation?

19 A. I don't remember.

20 Q. So you have seen it but you don't know when
21 and you don't know how?

22 A. Yes, that is correct.

23 Q. What I would like you to do is to explain the
24 flow sheet because it does purport to describe the
25 process during the period of time when you were at the

1 site and indicate especially the point along the flow
2 sheet where there would be some waste stream. For
3 example, some flow of wastewater into the drainage
4 system or onto the surface of the ground or otherwise;
5 but I am particularly focusing now on ways as we go
6 through this flow sheet and I would ask you to start
7 where it indicates tar in the upper left-hand side of
8 the Appendix D.

9 MS. COMSTOCK: Dennis, for clarification
10 are you asking to comment during his tenure at the
11 plant so 1969 would be the year.

12 MR. COYNE: That's right.

13 BY MR. COYNE:

14 Q. I would like you, if you would, Mr. Justin,
15 to indicate any respects that this is not accurate or
16 incomplete during that period when you were plant
17 superintendent?

18 A. Okay. I see the section where you are
19 speaking of in the upper left-hand corner where it says
20 "tar in". That indicates that tar being received was
21 discharged into the tar cistern from tank trucks and
22 tank cars; also, that it was pumped directly from tank
23 cars into tar storage which bypassed the tar cistern.
24 It then indicates tar being pumped from the tar cistern
25 into tar storage and at that point it shows the

1 discharge of decant water. That decant water would be
2 the water decanted from the tar cistern, which would
3 have been pumped through the separator and through the
4 ditch and the tar filter and out through the discharge
5 system. For the water coming from the tar storage
6 tanks it then shows again decant water, this water
7 again would have been discharged through the system.

8 Q. What was the decant water at that point?

9 A. It would be water that had separated from the
10 tar in the tar storage tanks, it was floating on top of
11 the tar.

12 Q. Before we proceed from that point, going back
13 for a minute to the tank cars shown in the upper
14 left-hand corner, there is a "COND", which I assume
15 refers to condensate?

16 A. That would be my interpretation.

17 Q. And I believe your testimony earlier was that
18 condensate was allowed to return to the surface of the
19 ground, is that right?

20 A. It was allowed to run onto the surface of the
21 ground when I first arrived. As I explained earlier, I
22 installed a collection system in which this would have
23 been discharged into a pipe, the pipe of which
24 channeled the water to a common collection point for
25 pumping through the system.

1 Q. By system you mean the settling basin?

2 A. Yes, sir.

3 Q. Thank you. Then would you proceed along the
4 flow sheet from the decant water point just beyond the
5 tar storage tank?

6 A. Okay. That then shows tar being pumped from
7 the storage tanks into the batch stills. From the
8 batch stills, if we continue coming out of the top and
9 to the right, we show the distillate which is being
10 removed from the process, we show it being condensed in
11 surface cooled water condensers and then we show four
12 cuts, the wet cut, the light oil, the middle oil and
13 the heavy oil. This was discharged into the vertical
14 tanks that I discussed earlier with you.

15 Q. The relatively new tanks that you identified?

16 A. Yes. I believe in our case the light oil and
17 the middle oil were actually blended in one tank not in
18 two.

19 Q. As indicated here on the flow sheet?

20 A. Yes. This shows then from the wet cut the
21 decant water being discharged and that again, as I
22 testified earlier, would have gone through the
23 discharge water system. It also shows the reclaimed
24 oil that would silt out of the wet cut being pumped
25 back to creosote oil storage tanks for blending and use.

1 Q. Before you proceed further, there is water
2 shown to the right of the condensers. What water was
3 that and what was its disposition?

4 A. That was cooling water from the cooling pond
5 and it was circulated back to the cooling pond.

6 Q. Was there ever a time, and let's go again
7 from '69 to '71, when that water was not recirculated
8 to the pond?

9 A. Yes, there would have been times.

10 Q. What were those occasions?

11 A. Those would be occasions when the temperature
12 of the water in the pond was such that I couldn't get
13 adequate condensation to control the air emissions
14 coming off of the receiving pans. At that point I
15 would pump water directly from the deep well into the
16 pond, from the pond over the condensers, and from the
17 condensers out through the discharge water system in
18 the plant.

19 Q. How is that engineered to be accomplished,
20 how could you do that?

21 A. By the way our piping and valving was
22 arranged.

23 Q. So you had a direct connection then at some
24 point at the condensers which could carry the cooling
25 water directly from that point out to the settling

1 basin and off the site, is that right?

2 A. Yes.

3 Q. That occurred only during the summer months,
4 is that right?

5 A. I don't recall.

6 Q. But your explanation of it today is that it
7 was done during the summer months especially, if you
8 can recall, is that right?

9 A. No, my explanation was it was done if the
10 water in the cooling pond became too hot during the use
11 of it. As to when this occurred I don't recall. It
12 may have occurred in the winter months as well as the
13 summer months. It may have occurred once a week, twice
14 a week, no particular interval.

15 Q. Now, these condensers that are shown here
16 also are referred to as box condensers?

17 A. I believe I have heard of them referred to
18 that way.

19 Q. Continuing on then, if you would, through the
20 flow sheet.

21 A. Following the point I was at previously
22 showing the light, middle and heavy oil and the
23 reclaimed oil from the wet cut were pumped to the
24 creosote oil storage tanks. We also show on this flow
25 sheet railroad owned creosote oil which I believe I

1 testified earlier was an incoming creosote oil. We
2 show that creosote oil also being pumped into the same
3 creosote storage.

4 From that creosote storage then we show
5 creosote oil going to the wood treating plant at Saint
6 Louis Park or being loaded into tank trucks or tank
7 cars for transport to customers. Backing up then to
8 the tar stills, we have another outlet coming from the
9 bottom which would be the residue or in this case pitch.
10 Pitch was our intended product from the distillation
11 process. We show that pitch then going to a refined
12 tar tank which would be a grade of refined tar or to a
13 soft pitch or to anode pitch which would be a harder
14 pitch. We show from the refined tar tanks the material
15 being pumped either to -- well, in this case it shows
16 it going to a tank truck for transportation to a
17 customer's. We show the soft pitch tanks, not only
18 receiving pitch from the tar still but from the tank
19 car, which was the soft pitch that I previously stated
20 we purchased from outside the company.

21 Q. And the condensate is shown there as well?

22 A. There is condensate shown there also. The
23 soft pitch was heated with steam, there were steam
24 coils in the tank car. That condensate then was
25 discharged either onto the ground or into my collection

1 system.

2 We show then from the soft pitch tank,
3 pitch either being pumped to tank cars or tank trucks
4 for shipment to customers. We also show it being
5 drummed as roofing pitch and we show some of it being
6 blended into the anode pitch tank.

7 We show on the anode pitch tank an air
8 condenser and scrubber system which was used to control
9 vapors that came from the tanks of hot pitch. That was
10 a recirculating system in which the sprays would knock
11 out the particles of oil that would normally have been
12 emitted to the air and be carried back into a
13 collection tank that was part of the closed system. At
14 varying intervals a certain amount of oil would build
15 up in this tank from the recirculating of the wash
16 water. That oil then would be pumped to creosote
17 storage tanks. It was a reuseable product. The water
18 itself then would have been decanted through the waste
19 water system.

20 We also show coming from the anode pitch
21 tank pitch going to pitch bays. During my period at
22 the plant those bays were not in operation.

23 I think that basically describes what I
24 see here.

25 Q. In addition to the decant water points

1 indicated on the flow sheet were there other flow
2 sheets where there were contributions to the
3 wastewater system? I am also including in that
4 question the points shown as condensate points.

5 A. There would have been some steam condensate
6 from the wet cut light oil, middle oil, and heavy oil
7 tanks, they were heated with steam coils. I need to
8 correct that, those tanks were heated with bayonet
9 heaters.

10 Q. Bayonet heaters were heated by steam, is that
11 right?

12 A. That is correct.

13 Q. So there would be some condensate from those
14 bayonet heaters and consequent discharge to the
15 wastewater system?

16 A. Yes.

17 Q. When did the pitch go into box cars rather
18 than tanks cars?

19 A. It was prior to my arrival at the plant and I
20 do not know how long it had been since they quit using
21 those bays.

22 Q. During the period when you were at the,
23 site '69, '70 and '71, how many tons were processed on
24 a monthly average?

25 A. I can give it to you in gallons, 450,000

1 gallons, as I recall, was the throughput that I
2 operated on.

3 Q. You said "the throughput"?

4 A. Throughput.

5 Q. What is the throughput?

6 A. The gallons of tar processed in a month and
7 and that held as a fairly constant average during that
8 period. That would be a fairly good average.

9 Q. Was that true of the years preceding you as
10 well?

11 A. I don't know.

12 Q. There was a drainage system which carried
13 wastewater from the refinery building into the settling
14 basin, you have talked about that and testified to that
15 today, is that right?

16 A. There was a method of getting it over there.
17 I know we pumped some. To the best of my recollection
18 we pumped it all.

19 Q. Would you describe that system as best you
20 can?

21 A. In a section of the refinery building there
22 was an old concrete pit that could collect water as a
23 sump and then be pumped from there through the basin.
24 There were the remains of a pipe trench that we also
25 had a pump in that we would pump water that was being

1 collected from the tank farm area.

2 Q. Would that be an area outside the refinery,
3 is that right?

4 A. It was part of the refinery area.

5 Q. So you are describing this trench system
6 which was located in the area south and west of the
7 refinery, is that right?

8 A. South and west and there was also a trench.
9 I don't recall its exact location, but the sump I am
10 referring to I believe would be the sump that is
11 located just southwest of the blacksmith shop.

12 Q. That's indicated as a sump, is it not?

13 A. Yes.

14 Q. And that's a sump just immediately to the
15 north of the word "garage" on the mylar map, is that
16 correct?

17 A. That is correct. As I say, I can't be sure
18 if that's the sump I am thinking of, but it was in that
19 general location.

20 Q. Did the wet cut flow through this drainage
21 system, these drain lines, pipe trench system, from the
22 refinery to the settling basin?

23 A. It would have been pumped to the settling
24 basin.

25 Q. Is there any other waste liquid or any other

1 waste material that would go through this drainage
2 system, in addition to the wet cut?

3 A. I can't think of any.

4 Q. Was water used to wash down the equipment in
5 the refinery?

6 A. Not that I recall.

7 Q. Or any other kinds of cleaning agents used to
8 clean equipment there which would have resulted in some
9 liquid or some flow into the drainage system?

10 A. I can't think of any.

11 Q. How many cities were in use at the time you
12 were at the site?

13 A. Four.

14 Q. Did each house a single box condenser?

15 A. Yes, there was a condenser for each of the
16 four stills.

17 Q. Did the charges proceed simultaneously?

18 A. By "charges" do you mean did we operate all
19 four stills at the same time?

20 Q. Let's assume that's what I mean?

21 A. Yes, on a routine basis there might have been
22 rare occasions where they would not all four have been
23 at the same stage of distillation.

24 Q. What was the time or duration per charge?

25 A. I believe we were operating on a 16 hour

1 schedule.

2 Q. And by 16 hour schedule, would you just
3 explain what you mean?

4 A. That would be the time required to charge a
5 still, fire it, empty it, recharge it and refire it
6 again.

7 Q. So the complete cycle?

8 A. It would be the complete cycle.

9 Q. I would like to direct your attention to the
10 condensers that we have talked about and I think we
11 refer to them sometimes as box condensers. Was water
12 recycled or used in a once through basis for the
13 condensers?

14 A. I thought I had explained that earlier.

15 Q. I think you did. Let me just summarize if I
16 understand you correctly, that is, ordinarily it is
17 recycled all though occasionally when the water in the
18 cooling pond was to warm there was water used on a once
19 through basis, is that basically what you testified to?

20 A. That is correct.

21 Q. Was water ever used to cool the pitch in the
22 stills?

23 A. Inside the stills.

24 Q. Let me ask the question this way. Was water
25 used to cool pitch?

1 A. Not that I can recall.

2 Q. I would like to ask you a couple questions
3 about the wet cut. The first question is approximately
4 what percentage of the coal tar was the wet cut?

5 A. As I recall, I used proof of inventory figure
6 of 22 percent.

7 Q. And you believe that to be an accurate
8 estimate?

9 A. I don't know.

10 Q. What percentage of the wet cut was water?

11 A. Well, wait a minute, I think I got confused
12 on your previous question. Did you ask me what the
13 percent of the tar was the wet cut meaning that whole
14 cut or meaning the water?

15 Q. You asked the question there. It is really a
16 two part question. Let me ask you in both parts and
17 then you can take them in sequence. What percentage
18 was water?

19 A. We are using a different nomenclature? I got
20 confused.

21 Q. Let's use nomenclature you understand so when
22 we read this we will be in agreement. Will you
23 describe what you mean? We will just use your terms
24 and get the facts on the record?

25 A. The percentage of wet cut as referred to in

1 the flow sheet diagram dated August 10, 1979, I don't
2 recall what that percentage would be. When I said that
3 the percentage was 2 percent I meant that as far as the
4 proof of inventory was concerned I used a figure of 2
5 percent to indicate the amount of water that would come
6 off of the distillation from the tar.

7 Q. Of that distillate that came off the tar,
8 what percentage of that would be water? As I
9 understand, looking at this flow chart part of the wet
10 cut was then decant water and part of it was oil and
11 went back into the creosote storage tank?

12 A. That's correct, and I don't know what percent
13 of the distillation was wet cut. I don't know what
14 percent of the wet cut was water. I know that for
15 proof of inventory purposes I used a figure of 2
16 percent moisture in the tar itself.

17 Q. The decant water that's shown as coming off
18 the wet cut, was there ever consideration given, do you
19 know, as to segregate this decant water and eliminate
20 its flow into the drain system?

21 A. I can't recall.

22 Q. I have some questions with regard to the
23 cooling water pond and that's the pond that we also
24 refer to on the mylar map as the pond. It's the open
25 pond along side the refinery. Are you familiar with

1 that pond?

2 A. Yes, sir, I am.

3 Q. What was the appearance of the cooling water
4 pond surface, was it discolored, did it have an oil
5 sheen?

6 A. I don't ever recall seeing an oil sheen or
7 any discoloration of the water in the pond. It had the
8 appearance of a stock pond. Do you know what I mean
9 when I refer to a stock pond.

10 Q. You mean if I go to a restaurant that sells
11 live trout I can go out in back and catch live trout,
12 is that what you mean?

13 A. The type of pond you would have if you went
14 in the back and dug a hole and filled it with water you
15 might have a brownish look because of suspended
16 particles in it.

17 Q. So apart from some dirty suspended dirt
18 material appearing in the water there was no other
19 discoloration which would be attributable perhaps to
20 oil or tar?

21 A. I don't recall any.

22 Q. Were any tests performed on the water in the
23 cooling water pond?

24 A. I don't recall.

25 Q. Did anyone ever ask you to perform such tests

1 or analysis?

2 A. I don't recall if they did.

3 Q. The water withdrawn from this pond was used
4 for what purpose?

5 A. Cooling water for the box condensers in the
6 refinery.

7 Q. Any other use?

8 A. I don't recall any.

9 Q. You said that the water used for boilers in '69
10 through '71 was water provided by the city, did you not?

11 A. That is correct.

12 Q. Was makeup water ever added to the cooling
13 water pond?

14 A. Yes.

15 Q. From what source?

16 A. The Republic deep well.

17 Q. Why was makeup water needed?

18 A. Due to loss by evaporation or probably
19 seepage into the ground from the pond.

20 Q. I have a question or two about the deep well
21 and the surge tank along side the well. Were you
22 familiar with the fact that there was a surge tank
23 along side the deep well?

24 A. If the tank you are talking about is the one
25 I am thinking of, there was a tank, as I recall it was

1 a rectangular type tank sitting on the ground, the
2 water from the well discharged into this, then this
3 emptied into the pond.

4 Q. Let's refer to that tank as the surge tank.
5 Would that be an accurate way to describe it or at
6 least we will use that term and you and I and the
7 readers of the transcript will know what we mean. As I
8 understand your description of the process, a pipe
9 would lead from the surge tank to the cooling pond, is
10 that right?

11 A. That is correct.

12 Q. And at what height above the ground was this
13 pipe located?

14 A. I believe it was below ground.

15 Q. And is this below ground pipe the only method
16 by which water would have been pumped from the surge
17 tank into the cooling pond from the Republic deep well?

18 A. Water was not pumped from the surge tank.

19 Q. Would you describe how it --

20 A. It flowed by gravity from the surge tank into
21 the pond.

22 Q. Thank you for the clarification. The
23 question is then, back again to this pipe that would
24 lead by gravity to flow from the surge tank into the
25 cooling pond, was that the only means by which water

1 would pass from the surge tank into the cooling pond or
2 was there some other avenue of flow?

3 A. That's the only method I know of.

4 Q. Was there a back flow valve in this line?

5 A. I have no knowledge of what was in the line.

6 Q. Was the cooling water pond cleaned during the
7 period '69 to '71?

8 A. I would classify it as being clean, yes.

9 Q. And what happened? Would you describe what
10 happens?

11 MR. POLACK: Off the record.

12 (At this time a discussion was held off the
13 record.)

14 BY MR. COYNE:

15 Q. I would be happy to repeat the question. How
16 often was the cooling water pond cleaned, or was it
17 cleaned at all, during the period 1969 through 1971?

18 A. I misunderstood you. I thought you said was
19 the pond clean. The pond was not cleaned during my
20 period at the plant.

21 Q. Are you aware of the fact that it was cleaned
22 prior to your coming?

23 A. I had been told that on one or two other
24 occasions it was necessary to dredge the silt from it.

25 Q. Who told you that?

1 A. I believe Mr. Finch.

2 Q. And when did he tell you that?

3 A. I don't know at what date he would have told
4 me this.

5 Q. Would it have been during your tenure at the
6 plant site?

7 A. It was during my tenure at the plant site.
8 We discussed dredging again because it was beginning to
9 fill up with silt.

10 Q. Why would it fill with silt as often as it
11 did?

12 A. There was a large drain pipe that channeled
13 storm water from the streets of Saint Louis Park into
14 the pond.

15 Q. And that was located where?

16 A. As I recall, approximately in the north side
17 and about the center of the pond or you might say the
18 northeast side and about the center.

19 Q. There is a line drawn on the map from a label
20 "pitch tank" and it's a label or a line that goes from
21 east to west across the cooling pond and as I see your
22 finger pointing you are pointing at a point just above
23 that line, is that right?

24 MR. COYNE: Let's go off the record.

25 (At this time a discussion was held off the

1 record.)

2 BY MR. COYNE:

3 Q. Let's go back on and ask the question. Is
4 that an accurate description of where you are
5 indicating and that is a point just above that line,
6 the pitch tank line there to the east side of the
7 cooling pond?

8 A. To the best of my recollection that's where
9 it would have entered.

10 Q. Were flows metered of the water withdrawn
11 from the pond?

12 A. No.

13 Q. Were flows metered of the water that flowed
14 into the pond?

15 A. No.

16 Q. At the time of demolition was the pond
17 drained and cleaned, do you know?

18 A. I do not know.

19 Q. Was there a steam ejector at the plant?

20 A. I believe so.

21 Q. And where would that have been located?

22 A. What I am thinking of is a steam ejector --
23 at least the one I am thinking of would have been
24 located at the treating plant.

25 Q. And as best you can recollect there was a

1 single steam ejector, is that right, that's the one you
2 just identified in the wood treating area?

3 A. Yes.

4 Q. What would be the consumption of pounds per
5 hour in consumption of steam of that ejector?

6 A. I have no idea. I am not familiar with the
7 operation of it. I am just aware that there was a
8 piece of equipment called a steam ejector.

9 Q. Are you aware of how many hours per day that
10 steam ejector would operate?

11 A. No.

12 Q. Or how many days per week?

13 A. No.

14 Q. Going back for a moment to the surge tank
15 that we earlier mentioned, did water enter the surge
16 tank from any other source than from the Reilly deep
17 well?

18 A. As I recall it had a cover on it. It may
19 have been possible for a small amount of rain water to
20 enter it but other than that I have no idea.

21 Q. Did water exit from this tank to any point
22 other than to the cooling pond?

23 A. I know of no other exit.

24 Q. The boilers that were in use at the Saint
25 Louis Park facility, were they equipment that was under

1 your supervision?

2 A. Yes.

3 Q. And where were they located?

4 A. They were located over in the treating plant
5 area in the area labeled "boiler room."

6 Q. How many boilers were there?

7 A. Two.

8 Q. Were they jointly used for both the treating
9 plant and the refinery?

10 A. Yes.

11 Q. What type of boilers were they?

12 A. The large boiler was a water tube boiler, I
13 am not certain, but I believe the smaller one was a
14 fire tube boiler.

15 Q. What was the capacity of the water tube
16 boiler in pounds of steam per hour?

17 A. I do not recall.

18 Q. Can you give us any kind of frame of
19 reference for the capacity of the water tube boiler,
20 the large boiler?

21 A. I do not remember what the horsepower was on
22 that boiler.

23 Q. The smaller of the two, the fire tube boiler,
24 what was its capacity in pounds of steam per hour?

25 A. I do not remember.

1 Q. How much smaller was the small one in
2 comparison to the large one?

3 A. It was considerably smaller. It would be
4 considered a stand-by boiler in the case of the failure
5 of the main boiler, and as to the ratio, I can't say.

6 Q. Were the boilers sufficient in terms of their
7 capacity to meet the needs of both the refinery and
8 wood treating operations?

9 A. Most of the time. There were rare occasions
10 in the dead of winter when we had to coordinate our use
11 of steam between the refinery and the treating plant.

12 Q. What was the excess capacity of these boilers?

13 MS. COMSTOCK: Do you understand the
14 question?

15 A. I understand the question, but excess
16 capacity has no meaning to me. I am not sure just what
17 you mean by "excess capacity".

18 Q. Well, as I understand, boilers have a design
19 so that there is an excess capacity as a general matter
20 for boilers, is that right, or boilers are designed and
21 installed with some excess capacity so that they are
22 sufficient to meet all the needs of their operation, is
23 that right?

24 A. Normally when you install boilers you
25 anticipate or calculated what your needs should be and

1 then you put in some additional capacity for a
2 contingency. There were times when there was no excess
3 capacity on these boilers. There would be other times
4 when the excess capacity may be 90 percent, depending
5 on the operating load.

6 Q. What was done with the boiler blow down and
7 coil condensate. Maybe we should take those separately.
8 What was done with the boiler blow down?

9 A. I don't recall whether it went through the
10 settling basin or whether it was discharged directly
11 into the ditch along Walker.

12 Q. So was there some avenue then which permitted
13 the bypass of the settling basin?

14 A. As I say, I don't know whether it went to the
15 settling basin or whether it went directly past the
16 settling basin.

17 Q. My question is a little bit different than I
18 think the answer you are providing. That is, I am just
19 asking in terms of the settling basin design, looking
20 at that for a moment, apart from the boiler blow down
21 and asking the question as to whether or not it was
22 possible to divert flow around the settling basin to
23 Walker Street as distinguished from having all flows to
24 Walker Street pass first through the settling basin.

25 A. I don't know.

1 Q. So you don't know of any ditch, pipe or
2 separate drain tile which would bypass the settling
3 basin, is that right?

4 A. That is correct.

5 Q. And one way or another then your testimony is,
6 as I understand, that boiler blowdown would eventually
7 get down to Walker Street in that ditch either going
8 through the settling basin or bypassing it?

9 A. That is correct.

10 Q. How about condensate from the boilers?

11 A. I am not clear what you mean.

12 Q. Was there condensate from the operation of
13 the boilers?

14 A. No, only below.

15 Q. You convinced me. Was a settling tank used
16 in conjunction with the boiler blowdown so that some
17 material would settle first before the flow would be
18 directed toward Walker Street?

19 A. I don't know. I know of none during my
20 period of time at the plant.

21 Q. Did the boilers operate 24 hours a day every
22 day of the week? If not when did the boilers operate?

23 A. During the summer months they would not have
24 operated on the weekend but during the winter months,
25 yes, they ran seven days 24 hours a day.

1 Q. In the summer then they ran five days a week
2 24 hours each of those days?

3 A. Unless we were on a seven day schedule then
4 they would run the weekend also.

5 Q. On a day when they were operating they would
6 operate 24 hours of that day as a general practice?

7 A. Yes.

8 MR. COYNE: Let's take a break.

9 (At this time State of Minnesota Deposition
10 Exhibit 101 was marked for identification by
11 the Court Reporter.)

12 BY MR. COYNE:

13 Q. I have shown you an exhibit dated February 17,
14 1971 from Workman and McPhee to the file, it's written
15 on an interoffice memorandum of the City of Saint Louis
16 Park and has been marked as Minnesota exhibit 101.
17 Have you read through the document?

18 A. Mine is not marked. Should it have a 101 on
19 it somewhere.

20 Q. No, it has just been marked by the Court
21 Reporter as Minnesota Exhibit 101?

22 A. I have read the document.

23 Q. Do you recall the visit by Workman and McPhee?

24 A. I have no recollection at this time of the
25 visit.

1 Q. Do you have any reason to believe that they
2 did not make such an inspection or visit?

3 A. No.

4 Q. What I have asked you to do in looking
5 through the document is to note whether it is accurate
6 or inaccurate and if it is typical of the refinery
7 operation in 1971. Would you go through the document
8 and indicate any areas in which you think it is
9 inaccurate or in which it should be supplemented so
10 that it is complete?

11 A. The document seems to follow a typical cycle
12 rather well. I do have a couple of comments that are
13 minor in nature. Noted on Page 3 at 750 a.m., the
14 second sentence of that paragraph says, "According to
15 Mr. Ohde this stream was composed of 12 percent naphtha
16 plus water." He was probably referring to naphthalene
17 rather than naphtha which would be a different material.
18 As to how he arrived at the 12 percent, I have no idea.
19 I would not know what the percentage of naphthalene was
20 in the stream. So I would question the validity of
21 that figure.

22 Q. Apart from the fact that you would not know
23 what the naphthalene percentage would be in that water,
24 do you think that 12 percent as a percentage is
25 reasonable or do you have any reason to believe that it

1 would be something other than 12 percent?

2 A. I don't know what it would be and I don't
3 understand how Mr. Ohde know what it would be or where
4 he obtained his figure. On Page 4 at 9:43 a.m. comment,
5 they again use the word naphtha. In all places in this
6 document where they are using naphtha I believe you
7 should be using the word naphthalene. I don't know
8 whether it's any significance or not. Also, in the
9 last sentence of that paragraph they say, "Pumping of
10 this wet cut was switched to another tank." I believe
11 that's misleading. They are talking about pumping to
12 the large outside tank. That would indicate that we
13 started pumping to another outside tank. I think they
14 intended that to mean that they switched to another
15 receive that was being pumped to the outside tank.

16 Q. So the destination for that would remain the
17 same, that is, the large outside tank?

18 A. That's correct. They were pumping the pans
19 in series. On 5-5 at 12:10 p.m. paragraph again it's
20 of a minor consequence. In the third sentence Mr.
21 McPhee was told that the maximum temperature permitted
22 by the Minneapolis Gas Company in these firing tubes is
23 1200 degrees. That maximum temperature was set by
24 Reilly Tar & Chemical personnel and not the Minneapolis
25 Gas Company. Those are the design temperature

1 limitations of the fire tubes.

2 Q. Okay.

3 A. There is one thing I point might point out on
4 Page 10 at 6:09 p.m. paragraph they make mention of a
5 black liquid effluent coming from the condensate
6 effluent into the stills of 14 and 15. This was not a
7 normal situation. It would appear that for some reason
8 or another there was some foaming taking place in the
9 stills and there was a carry over of heavy tar. That's
10 not normal but it does happen on rare occasions.

11 The cycle time I note was approximately
12 13 and a half hours, I believe I had told you
13 previously the cycle was around 16 hours. It could be
14 that this is a truer cycle than what my recollection of
15 16 hours was.

16 Q. I have a question about the 6:09 p.m. black
17 effluent and this paragraph continues, "This black
18 material will be collected in the pans and left to be
19 pumped off with the so-called wet cut on the next cycle."
20 How was that done and did this black material then
21 eventually find its way to the wastewater system?

22 A. No. The reason that was done, the black
23 material was a heavy tar, it would have contaminated
24 any distillate collected during that period of time.
25 So we simply took it into the wet cut tank in order to

1 pump it off and reprocess it. It would have settled
2 out.

3 Q. It would have eventually gone back into the
4 creosote storage tanks then?

5 A. In this particular case if it were bad enough
6 it may have even been pumped back into tar storage.

7 Q. But it would have been pumped back into
8 storage of one kind or another rather than going into
9 the waste stream?

10 A. Right.

11 Q. Do you have any further comments or
12 corrections on the document?

13 A. I can't think of any. There were a few word
14 usages in there which were slightly different from what
15 I might use, but other than that the document seems to
16 be basically accurate.

17 Q. I have a couple of questions about the stills
18 and the box condensers and you may have answered this
19 already but I just want to make it clear on the record.
20 Did each still have its own box condenser?

21 A. Yes, sir. I believe I stated that earlier.

22 Q. So that would it ever arise where one
23 condenser would handle product from more than one still?

24 A. I can't think of any situation or any way
25 that we would be able to do that.

1 Q. I have some questions about the wastewater
2 stream. What was the flow in gallons per hour or
3 gallons per minute any in the main drainage point where
4 the flow left the plant property?

5 A. I do not know.

6 Q. In any order of magnitude at all?

7 A. I would have no basis for giving you any
8 figure. I can't think of what the flow would possibly
9 be at this point in time.

10 Q. The oil-water separator was in use during the
11 period '69 to '71 when you were at the plant property,
12 isn't that true?

13 A. Yes, it was.

14 Q. How effective was it in removing oils and
15 other suspended material from the wastewater stream?

16 A. I don't believe I could give you an answer on
17 that because I don't know what the effluent from the
18 separator would consist of. In order to measure its
19 efficiency I would probably be measuring the amount of
20 oil mixed with the water going in versus the amount of
21 oil in the water coming out to arrive at an efficiency
22 and I don't have data in which I could give you that
23 figure from.

24 Q. Was that data ever available to you?

25 A. Not that I recall.

1 Q. Did you ever test the influent tube settling
2 basin and effluents from the settling basin or did
3 others that you are aware of that did that?

4 A. I don't recall having done this and I can't
5 recall of anyone else having done it.

6 Q. Was the system in use designed to recover
7 free oils?

8 A. Could you give me your definition of "free
9 oils"?

10 Q. Sure, I would be happy to. By free oils I
11 mean floating oils. The question is was the system
12 designed to recover floating oils?

13 MS. COMSTOCK: I am going to object to
14 that on the basis that this witness did not design the
15 system therefore its beyond the scope of his knowledge
16 but if you want to answer the question and have the
17 knowledge to do so go ahead .

18 A. I don't know what the intent of the design
19 was.

20 Q. Well, apart from the intent of the design,
21 did you have occasion to observe the basin?

22 A. Yes, I did.

23 Q. Are you familiar with its operation?

24 A. I vaguely recall the operation of that
25 particular basin.

1 Q. Would you describe its design as best you can
2 recall or how it operated?

3 A. As I recall, it was what we consider a
4 modified API type separator in that it had several
5 baffle chambers, some coming up from the bottom, some
6 coming down from the top so that it would trap any oils
7 that settled or it would skim any surface oils.

8 Q. At the time when you observed the settling
9 basin, did you observe it on more than one occasion?

10 A. Yes, I would have seen it on more than one
11 occasion.

12 Q. Would you see it once a day or once a week?

13 A. I don't recall the frequency that I would be
14 observing it. Basically the operation of that basin
15 was Mr. Barton's responsibility and I did not concern
16 myself with it.

17 Q. Were the baffles in place at the time that
18 you observed the settling basin?

19 A. I never saw the settling basin empty so that
20 I could see the complete internal design of that basin.
21 The baffles that I was able to see were in place.

22 Q. Which of the baffles were you able to observe,
23 those at the top that you had described, or those at
24 the bottom?

25 A. Those would be the ones at the top.

1 Q. And you could not observe those at the bottom?

2 A. No.

3 Q. Does this system, as you describe it, recover
4 emulsified oils?

5 A. I don't know.

6 Q. In facilities operated today by Reilly Tar
7 how are emulsified oils recovered from the waste stream?

8 A. I can't think of any streams we have that I
9 consider containing emulsified oils. The streams we --
10 that I am presently familiar with, after we channel the
11 water through a separator, the oils are removed down to --
12 I know less than 100 parts per million and I think
13 somewhat less than that. I don't believe there are any
14 emulsified oils in the water.

15 Q. So by current treating methods, you don't
16 have emulsified oils passing through your waste stream
17 after treatment, is that what --

18 A. Now, you said "treating methods", are you
19 speaking of a treating plant operation or water
20 treatment methods?

21 Q. Well, can you.

22 MR. POLACK: Off the record a minute.

23 (At this time a discussion was held off the
24 record.)

25 BY MR. COYNE:

1 Q. To summarize what we have said off the record,
2 we have said Mr. Justin does not know whether the
3 system in use at Saint Louis Park was or was not
4 capable of capturing emulsified oils, is that a fair
5 summary?

6 A. That is correct.

7 Q. How many baffles were there?

8 A. I do not recall.

9 Q. And their size?

10 A. I do not know.

11 Q. Do you know if a consideration was ever given
12 to the installation of equipment to remove emulsified
13 oils from wastewater at Saint Louis Park?

14 A. I am not aware of any discussion that took
15 place along those lines.

16 Q. Did the plant management ever consider
17 installing equipment to remove dissolved material other
18 than or in addition to phenols?

19 A. The system that was under design at the time
20 the plant closed had a piece of equipment being
21 recommended for removing the oils from water. As far
22 as any equipment for removal of materials other than
23 phenols and oil, I am not aware of any discussion that
24 went on; however, that would have been done in the
25 engineering department.

1 Q. This piece of equipment under consideration,
2 was that the piece of equipment referred to as the Eden
3 separator?

4 A. That's correct.

5 Q. Was the sump ever pumped out or cleaned out
6 during '69 to '71 when you were there?

7 A. I don't know.

8 Q. Was the settling basin ever pumped out or
9 cleaned out between 1969 and '71, do you know?

10 A. I don't know.

11 Q. Who would know?

12 A. Mr. Barton would know.

13 Q. In addition to Mr. Barton who would know?

14 A. Possibly Mr. Finch.

15 Q. I think you mentioned that there was a straw
16 filter, it's also referred to as a hay filter down a
17 long side Walker Street, is that your recollection?

18 A. Yes.

19 Q. Was there more than one straw filter?

20 A. Yes.

21 Q. How many were there?

22 A. Two.

23 Q. And what was the approximate dimensions of
24 those two filters or can you describe for us the box or
25 frame in which the straw filters were found or located?

1 A. I don't recall the dimensions of the boxes
2 that they were in.

3 Q. When was the straw filter or hay filter first
4 installed at Walker Street?

5 A. I don't know.

6 Q. Was it in use when you came to the site?

7 A. Yes.

8 Q. Was there also a straw filter or hay filter
9 located along side the settling basin?

10 A. I don't recall.

11 Q. How often were these filters changed?

12 A. I don't recall the intervals. We had a
13 procedure set up but I don't remember what it was.

14 Q. When you say "we", who do you mean?

15 A. The plant.

16 Q. And was that something done by personnel out
17 of the refinery or personnel out of the wood treating
18 or other personnel?

19 A. That was done by personnel in the wood
20 treating end.

21 Q. What was done with the straw filter or hay
22 filters once they were changed?

23 A. I don't know where that material went.

24 Q. Did you ever observe it piled up along side
25 the ditch or a long side the settling basin?

1 A. Yes, I recall seeing it piled up along side
2 the ditch probably right after they had changed the
3 filter until somebody came over and picked it up and
4 disposed of it by whatever method was used.

5 Q. The hay filter or straw filter was dirty then
6 I take it when you observed it?

7 A. Yes, but there was a container that they put
8 it in.

9 Q. What sort of a container was that?

10 A. It was a metal container as I recall.

11 Q. Was there a metal container located along
12 side Walker Street and also up along side the settling
13 basin then?

14 A. The one I am thinking of was along side the
15 hay filter.

16 Q. Meaning along side Walker Street?

17 A. Along Walker Street and I don't remember
18 whether it -- I don't believe it was a permanent metal
19 container, it was just something that they could sit
20 down there to put the straw in so that material
21 wouldn't run out of it back into the ditch. I don't
22 know if there was one up by the settling basin.

23 Q. Were there ever fires or explosions on the
24 Reilly Tar site, do you know?

25 A. Yes.

1 Q. When did they occur?

2 MS. COMSTOCK: You are talking about
3 Saint Louis Park?

4 MR. COYNE: Yes?

5 A. During my period of time?

6 Q. During your period of time.

7 A. I know I had at least one fire in the
8 refinery building at the still area. There was an
9 explosion in the boiler, I do remember that one because
10 it was Christmas Eve. Other than that I don't recall
11 any other specific fires or explosions.

12 Q. The fire in the refinery, did that result in
13 some loss of product?

14 A. That was the one that I referred to earlier
15 where a fire tube ruptured and there was a fire for a
16 short period of time and we were able to collect the
17 material after we put the fire out.

18 Q. Apart from these two incidents you don't
19 recall any other incidents in the period '69 through '71?

20 A. I can't think of any.

21 Q. Are you aware of any fires or explosions at
22 the time preceding your arrival at the site?

23 A. No.

24 Q. I would like to refer your attention to what
25 we have referred to as the Republic deep well,

1 sometimes I think also referred to as Well Number 23.
2 Do you know of any or have any information whatsoever
3 concerning any filling of this Reilly deep well or
4 Republic deep well?

5 A. I have read in reports that the well was
6 backfilled. I do not recall from what depth to what
7 depth.

8 Q. And which reports were these?

9 A. I don't even recall which report it was.

10 Q. Was this a report by Reilly Tar?

11 A. I do not know.

12 Q. Or by some outside company?

13 A. I don't know.

14 Q. Was there more than one report?

15 A. I don't know if I have seen reference of it
16 in one report or more than one report.

17 Q. Did you read this report?

18 A. Yes.

19 Q. And when was that?

20 A. On several occasions over the past several
21 years when I have been required as a result of this
22 trial to review some of the literature.

23 Q. Now, you say "some of the literature". Do
24 you mean some of the correspondence and files of Reilly
25 Tar Company or some of the corespondency in the

1 discovery files. Did you review this document again in
2 the past few weeks in preparation for your deposition?

3 A. I believe I recall a reference to the well
4 being backfilled in a document I read within the last
5 several weeks.

6 Q. If you made an effort to locate that document
7 again would you be able to do so?

8 A. Given enough time, I couldn't go right to it.

9 Q. Was it in the witness kit provided to you in
10 preparation for this deposition?

11 A. It may have been.

12 Q. Do you believe that it was?

13 A. I think that it was.

14 Q. Since the deposition will be continuing
15 tomorrow morning will you make an effort to locate that
16 document and bring that document with you?

17 A. Yes, I will.

18 MR. SCHWARTZBAUER: What time are you
19 going to offer him. In other words, he said earlier, I
20 think we were off the record, that if we left here
21 today he would have to hurry home because he has a
22 commitment tonight at 6:00. I am just wondering if you
23 would give him that opportunity tomorrow morning or
24 what?

25 MR. COYNE: Certainly we would want to

1 give him that opportunity. It would appear to be a
2 significant document, or may be, and it may merit the
3 time to locate it. If we were unable to find it in an
4 hour or so, we will come back, we would be back to
5 Indianapolis again. But I would prefer to complete
6 your examination to the extent that we can on this
7 visit.

8 THE WITNESS: It's a document that you
9 should have.

10 MR. COYNE: I am sure Mr. Schwartzbauer
11 has told you we have lots of documents but sometimes
12 it's a needle in a hay s tack, so it would greatly
13 facilitate this examination if we could refer to it.

14 MR. SCHWARTZBAUER: Let's talk later
15 then about the time that we will resume.

16 (At this time a discussion was held off the
17 record.)

18 MR. COYNE: We have had an off the
19 record discussion and Mr. Justin will take the
20 opportunity to find the document at 8:00 in the morning
21 and we will start at 8:30 in the morning.

22 BY MR. COYNE:

23 Q. Is that acceptable to you?

24 A. That is acceptable.

25 Q. Apart from this document to which you make

1 reference, do you have any other recollection or
2 information with regard to the filling of the Republic
3 deep well?

4 A. Not that I can think of.

5 Q. Do you know of any consultations between
6 Reilly Tar and Tom Renner or the Renner Well Company
7 with regard to the maintenance or repair or operation
8 of the Republic deep well?

9 A. I can't recall any discussions that I have
10 knowledge of.

11 Q. Have you seen reference to any discussions in
12 any of the correspondence or memoranda that you have
13 reviewed or that you are familiar with?

14 A. I can't think of any at the present time.

15 Q. Do you have any knowledge whatsoever or any
16 information or any recollection whatsoever of the
17 presence of tar particles or tar flecks in water
18 withdrawn from the Republic deep well?

19 MS. COMSTOCK: I believe the witness has
20 answered that question. You are free to answer it
21 again.

22 A. I thought I had answered that question
23 earlier.

24 Q. Would you please answer the question?

25 A. As I understand it, you asked if I had any

1 knowledge of tar particles or flecks in it. I have
2 never observed any in the well.

3 Q. And have you any information with regard to
4 the presence or absence of tar particles or tar flecks
5 in the water withdrawn from the Republic deep well?

6 A. I have seen reference in some documents
7 somewhere, made by whom I do not know, alleging that
8 such particles or particulate matter was seen.

9 Q. Would those documents also have been included
10 in the witness kit provided to you in preparation for
11 your deposition?

12 A. I don't believe so.

13 Q. How would you be able to locate those
14 documents to which you just made reference?

15 A. I guess I would just have to start searching
16 through all of the discovery documents on hand until I
17 found it.

18 Q. An investigation of the Republic deep well
19 has been done over the past several months and it has
20 been found that coal tar or tar product are found at a
21 depth of approximately 590 to 640 feet and again are
22 found at a depth of 680 feet. Are you aware of any
23 facts, in your own personal knowledge, or based on any
24 information whatsoever which may account for the
25 presence of these materials in that well?

1 A. No, I know of nothing that I am aware of that
2 would account for it.

3 Q. Are you aware of any person who may have
4 information with regard to the presence of these
5 materials in the well?

6 A. I can't think of anyone.

7 Q. Were you aware of the fact that the State of
8 Minnesota and the City of Saint Louis Park had filed a
9 lawsuit against the Reilly Tar company at the time when
10 you were still working at the Reilly site, the lawsuit
11 would have been filed in 1970 and you were there
12 through '71, were you not?

13 A. I was there through '71. At this point in
14 time I don't remember having knowledge of it while I
15 was there, although it's possible that I would have.

16 Q. Did you have any discussions or attend any
17 discussions with state personnel with regard to the
18 settlement or dismissal of the lawsuit then pending
19 against Reilly Tar?

20 A. I don't recall any such meeting.

21 Q. Did you have or attend any discussion with
22 anyone at all regarding settlement or dismissal of the
23 State lawsuit?

24 A. I don't recall being involved at all with the
25 settlement of the lawsuit.

1 Q. Or hear any accounts of the settlement of the
2 lawsuit?

3 A. No.

4 Q. So if I understand your testimony, you were
5 never informed or ever aware at any time prior to 1972
6 that the State had settled or agreed to settle that
7 lawsuit, is that right?

8 A. I don't recall being aware of it or being
9 made aware of it.

10 Q. Are you aware today of any information with
11 respect to any settlement of the lawsuit by the State
12 of Minnesota?

13 A. The only thing I can think of is when the
14 property was sold I believe there was an agreement made
15 by the City that the lawsuit would be dropped as a
16 condition of the sale.

17 Q. And what is your basis for that information?

18 A. I may have heard it verbally in discussions
19 with someone within the company but I don't know what
20 or I can't recall the source of my information.

21 Q. And if I understand you correctly there is no
22 information that you know of with regard to the State
23 having agreed to somehow or another settle its lawsuit?

24 A. I don't recall anything.

25 Q. Mr. Justin, I am showing you what has

1 previously been marked as Minnesota Exhibit Number 73,
2 it's a statement of the case, the current litigation by
3 the Reilly Tar Company, by its Counsel, Ed
4 Schwartzbauer. Have you seen this document before or
5 some draft of the document? Take a moment, if you will,
6 to go through the document or whatever time you need to
7 familiarize yourself with the discussion.

8 BY MR. COYNE:

9 Q. Have you read the document, Mr. Justin?

10 A. Not quite.

11 Q. Take your time?

12 A. I have read the document.

13 Q. Did you participate in its drafting?

14 A. I did not.

15 Q. In its editing?

16 A. I did not.

17 Q. Did you have any input into the document?

18 A. I did not.

19 Q. Do you consider yourself qualified to give
20 expert opinion as to toxicological matters?

21 A. No, sir, I do not.

22 Q. Or epidemiological matters?

23 A. No, sir, I do not.

24 Q. Mr. Justin, I would like to refer you to
25 another document, this one is a State of Minnesota

1 Exhibit Number 55 and if you would, please, review this
2 document.

3 A. I have read the document.

4 Q. This is a copy of a memorandum dated July 23,
5 1969 written by Mr. Finch to you, is that right?

6 A. That is correct.

7 Q. Was plant wastewater discharged to the
8 settling basin your responsibility at the time?

9 A. The settling basin was not my responsibility,
10 as I recall.

11 Q. This memo addressed to you asks you to do
12 certain things and I would like to address those
13 paragraphs one by one.

14 The first paragraph directs you to
15 maintain the straw filter and set up a program. Was
16 such a program established?

17 A. I don't recall but I am sure it was.

18 Q. How were you sure it was established?

19 A. Because Mr. Finch asked me to do so. I
20 generally did what Mr. Finch asked me to do.

21 Q. But you don't recall the program?

22 A. No, I do not.

23 Q. What was the purpose of the straw filter?

24 A. To remove any residual oils that might be
25 contained in the water prior to leaving the plant.

1 Q. Was it important to have the filter regularly
2 changed?

3 A. Yes, it would be.

4 Q. And if it was not regularly changed what
5 would the result be?

6 A. The filter, as any other filter, would
7 eventually load up, absorb all the material it was
8 capable of absorbing and material would start passing
9 through the filter then.

10 Q. What material would the straw filter capture
11 or absorb?

12 A. To the best of my knowledge it would catch
13 the residual oils that were in the effluent.

14 Q. Prior to this memo in July of 1969 was there
15 a program to change the straw filter?

16 A. I know the straw filter was always being
17 changed at some interval, I don't know what the
18 interval was prior to this time.

19 Q. Do you have any explanation for the reason
20 that Mr. Finch would direct you to set up a program if
21 there was a program already in place which resulted in
22 the straw filter always being changed?

23 A. Could you repeat that, please?

24 MR. COYNE: Would you read that back,
25 Kirby, please?

1 (Whereupon the requested portion of the
2 record was read by the Court Reporter.)

3 A. No, I have no reason.

4 Q. So your testimony today is that there was a
5 systematic changing of the filter prior to July of 1969,
6 is that right?

7 A. I stated that the filter was changed on some
8 regular or maybe irregular basis prior to this time.

9 Q. How often was it changed?

10 A. I don't know.

11 Q. So you don't know how often it was changed?

12 A. No, sir, I do not.

13 Q. Do you know whether it was once a year or
14 once every six months or once a week?

15 A. I don't know.

16 Q. The cleanout boxes to which Mr. Finch refers
17 in the second paragraph, where were they located?

18 A. I don't know what this is referring to at
19 this time.

20 Q. Are you familiar with the term cleanout boxes?

21 A. I don't know what they would be referring to
22 in this letter.

23 Q. But you know what cleanout boxes are
24 generally, apart from this particular instance here,
25 and if so would you describe what a cleanout box is?

1 A. No, I don't know what a cleanout box would be.

2 Q. Do you know if the tile line from the
3 settling basin to Walker Street had manholes in it?

4 A. Yes, it did.

5 Q. And could one gain access to the line through
6 those manholes?

7 A. Yes.

8 Q. And were those manholes used as a point of
9 entry into the line to clean out the line?

10 A. They could have been, I don't know if they
11 were.

12 Q. So you don't whether or not the tile line was
13 ever cleaned out?

14 A. No, I do not.

15 Q. Do you know on whether or not you established
16 a periodic check of those manholes along the sewer line
17 if that is what Mr. Finch was referring to in this
18 memorandum?

19 A. I don't.

20 MS. COMSTOCK: I am not sir what your
21 question is. Would you restate it?

22 BY MR. COYNE:

23 Q. Did you ever establish a program to clean out
24 the tile line leading from the settling basin to Walker
25 Street?

1 A. I don't recall ever doing so. As I stated
2 previously, Mr. Barton usually handled that end of it
3 and he and I may have gotten together on this and
4 decided who would do what.

5 Q. Do you recall getting together with him and
6 deciding who would do what?

7 A. No, I do not.

8 Q. And do you have any explanation for why Mr.
9 Finch would address the memorandum to you when you said
10 it was Mr. Barton that had responsibility for these
11 matters addressed in the memo?

12 A. No, I do not.

13 Q. The third paragraph says that, "The culvert
14 going under Walker Street should be checked for
15 clearance. The water does not seem to be flowing
16 freely through the culvert." Do you have any reason to
17 believe that Mr. Finch's observation that the water was
18 not flowing freely through the culvert was mistaken or
19 incorrect?

20 A. No.

21 Q. So then you do assume that there was some
22 blockage in that culvert?

23 A. Apparently he thought there was.

24 Q. Did you ever observe any blockage in that
25 culvert?

1 A. I don't recall observing any.

2 Q. Did you set up a program to check for
3 clearance in that culvert?

4 A. Again, I don't recall doing it. I would
5 assume I did.

6 Q. I would like you to read another exhibit
7 which I would like to have marked.

8 (At this time State of Minnesota Deposition
9 Exhibit 102 was marked for identification by
10 the Court Reporter.)

11 BY MR. COYNE:

12 Q. I have shown you a two page document now
13 marked as Minnesota Exhibit Number 102. The first page
14 of this two page exhibit carries the date of October 28,
15 1969. The second page of the document does not have a
16 page. The stamp in the lower right-hand corner of
17 221167 of the first page is followed in sequence by the
18 second page which is 221168, best I can note, and I
19 think the reason why these two documents are attached
20 here. Is this your handwriting on the first page of
21 this document?

22 A. It does not appear to be. I would say it is
23 not.

24 Q. Were you ever in a meeting or aware of any
25 meeting or gathering of the company personnel, and

1 again Hickock referenced in the second line of this
2 first page of Minnesota 102?

3 A. I can't recall at this time.

4 Q. The second page of the document has your name
5 appearing in the upper right-hand corner. Is that your
6 handwriting?

7 A. I think it is, just my name only is the only
8 part that I think is my handwriting.

9 Q. What would that indicate to you?

10 A. I don't know. I have no explanation for it.

11 Q. On occasion do you sign memoranda or notes
12 indicating that you have received them?

13 A. No.

14 Q. And although you do recognize what appears to
15 you as your signature in the upper right-hand corner,
16 the remainder of the handwriting on that page does not
17 appear to be yours

18 A. That is correct.

19 Q. The, "Phenol,.001 drinking", which is
20 approximately parallel to your signature, is that in
21 your handwriting?

22 A. I don't recognize it as my handwriting. I
23 would say it is not.

24 Q. Is that standard familiar to you? Do you
25 know the basis for that number?

1 A. Not absolutely.

2 Q. Can you tell me what you do know about it?

3 A. I am not sure what it is making reference to.

4 Q. Do you have any idea what it may pertain to?

5 A. It may pertain to a drinking water standard.

6 Q. A drinking water standard of the City or the
7 State or the Federal Government?

8 A. I don't know.

9 Q. Did you have conversations with city
10 personnel with regard to a phenol standard?

11 A. Yes, there were conversations with the city
12 regarding a phenol standard or the effluent that we
13 wanted to discharge.

14 Q. And with whom were those conversations?

15 A. I don't recall with whom, when or where. I
16 know discussions did occur.

17 Q. Were they with the same person or with
18 several people?

19 A. I don't know.

20 Q. The number that appears here, .001, is that a
21 number which you brief was associated with the effluent
22 discharge limitations suggested or imposed by the city?

23 A. No.

24 Q. What would that number pertain to then?

25 A. As I said earlier, I don't know unless it's a

1 national or state drinking water standard that was in
2 effect at that time.

3 Q. Did you also confer with state personnel with
4 regard to establishing a standard for the effluent?

5 A. I don't recall if I did or not.

6 Q. Would you be aware of conversations by others
7 within the company of state personnel pertaining to an
8 effluent standard?

9 A. None that I can think of specifically.

10 Q. I have another document for you and I would
11 ask you that you review the document. It's a document
12 dated January 28, 1970 and it is being marked as
13 Minnesota Exhibit 103

14 (At this time State of Minnesota Deposition
15 Exhibit 103 was marked for identification by
16 the Court Reporter.)

17 A. I have read the document.

18 Q. Is this a copy of a memorandum written by you
19 to Mr. Finch?

20 A. It is.

21 Q. Do you recollect a meeting of January 28,
22 1970 with the individuals named in your memorandum?

23 A. I do not have any memory of the meeting.

24 Q. Other than what is set forth in the
25 memorandum?

1 A. Yes, other than what is in the memorandum.

2 Q. In the fourth line, Mr. Justin, you wrote,
3 "Explained our plans of handling our effluent." What
4 were those plans that you explained?

5 A. I don't recall what our plans were.

6 Q. Were you handling the planning for or
7 improvements in the wastewater system at the Reilly
8 plant in Saint Louis Park at that time?

9 A. The plans for handling the effluent would
10 have been developed by our engineering department. The
11 only thing that I would have done would have
12 implemented those plans from the standpoint that once
13 the specifications were set, the drawings were made,
14 the equipment was ordered, I would oversee the
15 construction and the implementation of it.

16 Q. What was the concept being defendant by you
17 at that time with regard to handling the effluent?

18 A. I don't recall what our concept was at that
19 time.

20 Q. I am distinguishing now between engineering
21 drawings, which I can appreciate are produced by your
22 engineering department on the one hand, and a concept
23 or idea or overall approach on the other hand. As I
24 understand your answer you do not know what the overall
25 approach was or direction proposed to be taken at that

1 time?

2 A. I don't know what our thoughts were or what
3 my thoughts were in regard to what we were going to do
4 at that time. I know we were making efforts to
5 discharge into the sanitary sewer and that we were
6 trying to reach agreement with the city to accept this.

7 Q. And would you, as part of that, install some
8 improved waste handling mechanism, some improved
9 separator, would that have been the Eden separator?

10 A. Yes, it was my understanding that that was
11 part of the system.

12 Q. The memorandum goes on to say, "Mr. Kays was
13 interested in how we would separate the plant runoff
14 and the effluent from the refinery." Could you explain
15 that?

16 A. It would appear that there was some talk that
17 the storm water would be separated from process water
18 and the storm water would go to storm sewer and the
19 process water would go to the sanitary sewer. I don't
20 know or I can't recall if we concluded at that point in
21 time that it was feasible to do so.

22 Q. What would the advantage be to segregate the
23 flows?

24 A. The cost, among other things. You pay for
25 the amount of money or the amount of water that goes

1 into a sanitary sewer at a certain weight, the sizing
2 of the equipment to handle the different volumes of
3 water. It would be one of economics, among other
4 things.

5 Q. So your equipment would be sized smaller and
6 would cost you less to construct and to operate, I
7 assume, if it was going to treat the effluent from your
8 process as distinguished from the effluent together
9 with all the storm water?

10 A. Yes.

11 Q. Would the separator also operate better if it
12 was not also handling, in addition to the effluent, the
13 storm water as well?

14 A. Well, you would simply size it to handle the
15 volume you intended. It has its design parameters and
16 you would buy a separator that was designed to handle a
17 certain volume at a certain concentration.

18 Q. If the separator though was designed for a
19 certain capacity, and assuming that was the capacity of
20 the effluent line, but in addition received the storm
21 water, it would then be operating beyond its capacity
22 and be relatively in effect different in its treatment?

23 A. That would be correct.

24 Q. And wasn't that generally the case at Saint
25 Louis Park where the settling basin received both storm

1 water flows in addition to plant process water?

2 A. I don't know what the design limitations were
3 of the separator and I don't know what the flow was
4 through it so I don't know if it were being operated
5 beyond it's designed capacity or not.

6 Q. Did storm water enter the separator in
7 addition to process waste water?

8 A. I don't know.

9 Q. During periods of rain and other storm
10 periods your testimony is that you don't know whether
11 or not the settling basin received these storm water
12 flows, is that right?

13 A. That's right.

14 Q. You refer to Mr. Kays in the middle of the
15 paragraph to state that, "Any storm sewer water would
16 be discharged directly to Minnehaha Creek and therefore
17 must meet government specifications." Do you recall
18 what those specifications were?

19 A. No, sir, I do not.

20 Q. Might that have been the .001 phenol that was
21 referred to in the earlier document?

22 A. I don't know.

23 Q. Is it sometimes the case that a creek can
24 have a drinking water standard as the standard for
25 discharge into the creek?

1 A. It could if the local authorities wanted to
2 pass such a law.

3 Q. The memo continues, "They requested an
4 analysis of our discharge in order to determine what
5 must be done to meet these specifications." Did you
6 then provide them with an opportunity to take a sample
7 and do you recall what the analysis established?

8 A. I would assume if they requested a sample we
9 would have provided them the opportunity and help in
10 taking the sample. I do not recall if or when one was
11 taken or what the results were.

12 Q. Do you recall yourself or some employee of
13 Reilly Tar at Saint Louis Park taking a sample as the
14 city was at that time taking samples itself?

15 A. Could you restate that question, please?

16 Q. Do you recall anyone on the Reilly Tar
17 payroll taking samples of the discharge at the time or
18 about the time the city was taking samples of the
19 discharge?

20 A. I can't recall whether we took samples at the
21 same time they took them or not.

22 Q. Do you recall samples ever being taken of the
23 discharge by Reilly Tar?

24 A. We took samples of the discharge, yes. I
25 don't recall the specific dates but I know they were

1 taken.

2 Q. And where were they taken?

3 A. I know samples would have been taken at the
4 outflow of the weir at Walker Street.

5 Q. Any other place?

6 A. I can't recall specifically any other places
7 where we took samples.

8 Q. I would like to continue with another exhibit,
9 this will be Minnesota Exhibit Number 104, it's a
10 memorandum dated January 30, 1970 and I would like you
11 to read this document which is a document of four pages

12 (At this time State of Minnesota Deposition
13 Exhibit 104 was marked for identification
14 by the Court Reporter.)

15 MR. COYNE: Back on the record.

16 BY MR. COYNE:

17 Q. Mr. Justin, I have shown you Minnesota
18 Exhibit 104 and it refers to a flow sheet in the second
19 line of the memorandum and before we go beyond that
20 this is a memorandum of January 30, 1970 written by you
21 to Mr. Leshar, is that correct?

22 A. That is correct.

23 Q. And we have provided a second page of this
24 document, a flow sheet, also dated January 30, 1970.
25 Do you recognize the handwriting, "Sent to Leshar,

1 1-3-70"?

2 A. Yes, I do.

3 Q. Is that your handwriting?

4 A. It is.

5 Q. Would it be your best recollection, based on
6 this document, that this flow sheet was sent to Leshner
7 1-30-70?

8 A. I so noted on the bottom that I sent it to
9 him on 1-30 of '70 and assume that I did so.

10 Q. Assuming you did so would it be your opinion,
11 based on your best recollection, that the flow sheet of
12 the second page of this memorandum would have been sent
13 under the cover of the memorandum dated 1-30-70?

14 A. It's possible but I have no way of knowing.
15 If I would have sent him a document I would have sent
16 it with a cover sheet. The cover sheet bears the same
17 date as the document I sent him. However, I have no
18 way of knowing if that is the document referred to in
19 the cover letter.

20 Q. What would be your basis to doubt that this
21 flow sheet dated the same date, sent by you the same
22 date as the memorandum, sent the same date by you, are
23 not one, as I stated with the other --

24 A. I have no reason to doubt it anymore than I
25 have to assume that it is the document. I have no

1 opinion on it. Am I clear that I have no reason to
2 doubt it?

3 Q. So you believe it to be the case?

4 A. Not necessarily. I have no reason to assume
5 that the cover letter is referring to this document.

6 Q. Well, maybe we are in a sementical struggle
7 you and I. Let's cut through it. The first page of
8 this document is a memo written by you dated January 30,
9 1970, is that right?

10 A. That is correct.

11 Q. Do you believe that this memo was sent to Mr.
12 Leshner on January 30, 1970?

13 A. Yes, I do.

14 Q. The second page of this document is another
15 document, this one in your handwriting, indicating it
16 was sent by you on January 30, 1970 to Mr. Leshner. Do
17 you believe it was sent to him on that date?

18 A. Yes, I do.

19 Q. The memorandum on the third line refers to an
20 application to be submitted. To whom was an
21 application to be submitted and what was the purpose of
22 that application?

23 A. I do not recall.

24 Q. Were you in the process of making an
25 application to a unit of government?

1 A. From the cover letter it would appear that an
2 application of some sort was going to be made possibly
3 to Saint Louis Park but I don't recall what the
4 application was for.

5 Q. Well, is Saint Louis Park requiring an
6 application for the Eden separator or for the
7 connection to its sewer facilities, do you recall?

8 A. I don't recall whether they had a permit
9 system in place for that operation or not. I don't
10 know whether they were requiring us to submit an
11 application for it.

12 Q. Do you have any reason to believe that the
13 application was to be submitted to any unit of
14 government other than the City of Saint Louis Park?

15 A. No, from the cover letter it would indicate
16 that some type of application was intended to be
17 submitted to Saint Louis Park.

18 Q. Let's go now to the second page of this
19 memorandum. This is a flow sheet of the refinery
20 process, is it not?

21 A. Yes, it is.

22 Q. I would direct your attention to the
23 left-hand side of this document, to the vertical column
24 running down the left-hand margin, and you will note
25 that in a box entitled "wet cut separator tank" there

1 is an "X" through that symbol or through that part of
2 the drawing. Can you explain that?

3 A. No, I cannot.

4 Q. Was there a wet cut separator tank in place
5 and in operation in January of 1970?

6 A. There was a tank that was used for that and
7 it would have been referred to as the first cut tank.
8 It could be considered a wet cut separator tank and we
9 may have been referring to it as such.

10 Q. So you would assume that that was one in the
11 same?

12 A. From the flow sheet, since the discharge was
13 from the receiving pans and into a block diagram
14 indicating a wet cut separator tank, that is probably
15 the tank that we were referring to.

16 Q. And you have no explanation for why it's X'd
17 out on this drawing?

18 A. No, sir, I do not.

19 Q. It then indicates a catch basin. What
20 facility was that?

21 A. I can't recall.

22 Q. Was there a catch basin that was part of your
23 process at that time?

24 A. I can't recall anything that I would refer to
25 as a catch basin.

1 Q. And then the next facility in line was -- can
2 you read that for us?

3 A. It looks like "separator and filter".

4 Q. That also has an "X" through it?

5 A. Yes.

6 Q. Can you explain that?

7 A. No, I cannot.

8 Q. Do you recall what the basis or reason was
9 for your drawing this?

10 MS. COMSTOCK: I am not sure it's going
11 to establish this witness drew this.

12 BY MR. COYNE:

13 Q. Did you draw this?

14 A. I believe I did, that's my handwriting in
15 printing and I have every reason to believe that I did
16 draw it.

17 Q. Do you recall the basis or reason for your
18 having drawn it?

19 A. No, I do not.

20 Q. Some of the facilities you will note are
21 indicated as proposed. Proposed paper condenser and
22 proposed paper condenser. Is it possible that the
23 catch basin was being proposed at the time but you
24 don't have it indicated as such?

25 A. I don't know. Looking at this enclosure it

1 appears that the catch basin also has an "X" in it but
2 it didn't copy very well.

3 Q. That may be. The third and fourth pages of
4 this memorandum are dated at a later date and would not
5 have been sent under cover of the memo January 30, 1970.
6 I would like to address the third of these pages
7 entitled "Air Pollution Control" and "Reilly Tar
8 Chemical Corp." It bears the date February 3, 1970 by
9 W. J. Was this prepared by you?

10 A. Yes, it was.

11 Q. Is that a depiction of the air pollution
12 control facilities in the operation with the exception
13 of the one proposed water cooled paper condenser
14 indicated on the page?

15 A. Yes, although it may be a little misleading.
16 The item that says, "pitch receiving tanks" and it
17 shows a vapor line and an arrow pointing downward and
18 underneath that is a water scrubber. It shows a line
19 coming from the receiving pans for distillate and it
20 says "vapor line" and there is an indication that that
21 also was going into a water scrubber. That would not
22 be the case at that time. It would be the case for the
23 vapor line from the pitch receiving pans, they went to
24 a water scrubber.

25 Q. Where did the other vapor line go?

1 A. From the receiving pans at that point in time
2 probably were venting to the atmosphere.

3 Q. The fourth of these pages is also dated
4 February 3, 1970 and your initials W. J. appear there,
5 do they not?

6 A. Yes, they do.

7 Q. Would this have been prepared by you?

8 A. I believe I did prepare this also.

9 Q. Does it accurately depict the operation at
10 that time?

11 A. I would have to assume so. In preparing this
12 I would have asked Mr. Barton's input because I was not
13 familiar with the treating operation and this would
14 have been drawn up based on input that someone else
15 gave me.

16 Q. Do you know the purpose for preparing the
17 third and fourth pages of this memorandum of the air
18 pollution control diagram of the wood treating flow
19 chart?

20 A. No, sir, I do not.

21 Q. I would like to now show you what has been
22 marked and introduced by Reilly Tar as Exhibit Number
23 41 and ask that you take the time to read it. It's a
24 memorandum dated April 20, 1970 written by a Mr.
25 Michael Lutz, office memorandum. I would like to

1 particularly direct your attention to his description
2 of the refinery process.

3 A. I have read the document.

4 Q. Do you recall this visit by Mr. Lutz?

5 A. No, sir, I have no recollection at this time
6 of the visit.

7 Q. Was Mr. Lutz alone, do you know?

8 A. I do not know.

9 Q. Mr. Justin, I would like you to look
10 carefully at the description of the refinery process
11 and that description begins at the bottom of the first
12 page and extends through the middle of the second page.
13 Are there any inaccuracies or corrections that need to
14 be made with regard to Mr. Lutz' description of the
15 refinery process at the time of his visit?

16 A. There are some comments I might make that are
17 minor in nature as to what his description might imply.
18 On the first page, the fourth line down, he is
19 referring to the coal tar being stored in an
20 underground concrete pit. If I were describing the
21 cistern I would not describe it as being underground.
22 Underground to me depicts something that's burried
23 completely. The system was in ground but not
24 underground. He made a note at the top of Page 2 that
25 the stills operate at 400 degrees C. That's the

1 temperature at the end of the batch. They don't
2 operate at all times at that temperature during the
3 batch process. He also makes reference that the
4 creosote oil is removed as a vapor from the heavier
5 pitch. It's actually being removed from coal tar and
6 not from heavier pitch. Other than that, the
7 description, although rather short and crude
8 description, is basically correct.

9 Q. I would also like to address you to the third
10 page of the memorandum, the paragraph beginning, "They
11 would like to know specifically which effluent
12 standards they need to meet." Did the company
13 subsequently receive advice from the state as to what
14 the effluent standards would be?

15 A. My recollection is that we were never able to
16 get a specific list of effluent standards and
17 limitations on which to base the design of the system.

18 Q. And if the state had given such information
19 do you believe you would have been aware of it?

20 A. I am sure I would have been.

21 Q. And why was that so?

22 A. At this point in time I was involved to some
23 extent with the handling of the water and the future
24 plans in the handling of the water. It would probably
25 have become my responsibility to supervise any

1 equipment that was installed.

2 Q. Supervise the operation?

3 A. Yes, sir.

4 Q. I would now like to refer you to another
5 exhibit, this one is being marked as Minnesota Exhibit
6 105, it's a memorandum dated June 25, 1970, and ask you
7 to take the opportunity to read through the document.

8 (At this time State of Minnesota Deposition
9 Exhibit 105 was marked for identification by
10 the Court Reporter.)

11 A. I have read the document

12 Q. Is this a copy of a memorandum written by you
13 to Mr. Finch?

14 A. It is.

15 Q. And who was Mr. McPhee?

16 A. I don't recall Mr. McPhee's exact title. I
17 know he was with the city of Saint Louis Park. I think
18 he had to do with their Health Department.

19 Q. The fourth line of the memorandum states, "He",
20 referring to Mr. McPhee, "observed our pan control
21 system." What was that system?

22 A. That would have been the system that you
23 noticed on the previous flow sheet that said proposed
24 vapor condenser. I had installed, at least I assumed
25 from the comment here, that by that time I had

1 installed the vapor condenser system and blower to
2 collect the condensables from the exhaust of the
3 receiving fans and condense them.

4 Q. If you would refer me to the earlier exhibit,
5 because I don't have it right before me, and just
6 indicate on the record which part of that figure you
7 believe to be the pan control system?

8 A. It's on the document which says, "Sent to
9 Leshner 1-30-70."

10 Q. That would be the second page of this exhibit?

11 A. It would be the second page.

12 MS. COMSTOCK: That's Exhibit 104.

13 A. Minnesota exhibit 104 and it would be the
14 block diagram here that says "proposed vapor condenser".

15 Q. And at that point --

16 A. I am sorry, I believe I have the wrong
17 drawing for you, it would be the drawing dated 2-3 of '70
18 titled "Air Pollution Control, Reilly Tar & Chemical
19 Corp." And it would be the water cooled vapor
20 condenser shown in dashed lines as a block with the
21 inlet coming from the receiving pans and then going
22 into a water scrubber.

23 Q. So in the four months from the drawing to the
24 memo that part of the facility had been installed, to
25 the best of your recollection?

1 A. February of '70. It would appear from
2 February to June 25th it had been installed.

3 Q. What was the purpose of the pan control
4 system?

5 A. To condense the condensables that were
6 exhausting from the pans.

7 Q. You will note that the memorandum continues
8 to make reference to plans for the cistern. You will
9 notice cistern mentioned in the last line of the
10 memorandum. What was the plan for the cistern?

11 A. The only thing I could think of would be
12 removing the roof.

13 Q. Was that in a poor state of repair?

14 A. Yes, it was.

15 Q. Now, if you remove the roof wouldn't you have
16 the rain water and precipitation then entering the tar
17 in storage in the cistern?

18 A. Yes, you would.

19 Q. So you would have to decant more water off
20 the cistern, wouldn't you?

21 A. At this point in time it would have made no
22 difference comparing the condition of the roof to the
23 condition it would have been after the roof was removed.
24 It would have been little difference.

25 Q. It leaked as much as it would have rained I

1 guess. I would like to refer you also now to Minnesota
2 Exhibit Number 106, and this is an exhibit dated July 6,
3 1970?

4 A. Could we back up for one moment?

5 Q. Sure.

6 A. The plans for the cistern also included
7 replacing the roof with a flat roof after we cleaned
8 the cistern. I wanted to complete. You had asked me
9 what our plans for the cistern were.

10 Q. Thank you for completing the answer. The
11 next exhibit is Minnesota 106 and, as I stated, it's a
12 memo dated July 6, 1970 written by Mr. Leshar to Mr.
13 Ryan. If you would take the time necessary to review
14 the document.

15 (At this time State of Minnesota Deposition
16 Exhibit 106 was marked for identification by
17 the Court Reporter.)

18 BY MR. COYNE:

19 Q. Have you had the opportunity to review it?

20 A. I have read the document dated July 6, 1970.

21 Q. This document, which I have requested to be
22 marked Minnesota 106, has previously been marked as
23 Minnesota Exhibit 77 and will be found at both places
24 in the document collection. The memo references a work
25 order request for laboratory equipment. The laboratory

1 equipment specifically was a Colorimeter. It indicates
2 on the third and fourth line that you have commented
3 and justified -- well, let's just read that. Second
4 full sentence. " As indicated by Mr. Justin's comments
5 and justifications I have been promoting for sometime
6 the need for accumulating historical and current
7 information on levels of effluent quality at Saint
8 Louis Park." Is this an accurate statement? That is,
9 had you been making those comments and justifications?

10 A. I think Mr. Leshar is saying he had been
11 making those comments. I apparently submitted a work
12 order and with it submitted comments and justifications
13 for the expenditure.

14 Q. Thank you for that correction. Were you also
15 of the opinion that there was a need for accumulating
16 historical and current information on level of effluent
17 quality?

18 A. I am not sure what my thoughts would have
19 been at the time.

20 Q. As best you can recall?

21 A. I probably would have agreed that we did need
22 to collect some good data.

23 Q. And what was the need for such information?

24 A. I would assume that we needed to know what
25 was in our effluent in order to design control

1 equipment to reduce it to a level that would be
2 acceptable to the various agencies.

3 Q. The memo continues, "We urgently need more
4 and regular information, and the subject unit will
5 permit him to collect phenol quality information
6 regularly." Was this your job to do so, that is, to
7 collect phenol quality information?

8 A. It was becoming my job, part of my job. Any
9 analytical work that was done was delegated to me.

10 Q. And this would include taking and analyzing
11 samples of your effluent then?

12 A. Yes, maybe not personally doing the
13 analytical work but seeing that it was done.

14 Q. The handwriting in the upper left-hand corner,
15 do you know whose that is or whose initials would be T.
16 E. R.?

17 A. T. E. R. would be Tom E. Reilly.

18 Q. Whose initials would be S. C. B.?

19 A. It could be Stanley Boyle.

20 Q. What was his position?

21 A. Stanley was a purchasing agent with the
22 company at that time.

23 Q. And whose handwriting at the lower right-hand
24 corner of the memo?

25 A. Where it says, "Can be moved and used"?

1 Q. Correct.

2 A. That appears to be Mr. Leshner's handwriting.

3 MR. COYNE: Thank you. I have an
4 additional document and it's a document already
5 introduced as Minnesota Exhibit Number 93 and I would
6 ask that you review it and you will note that your name
7 appears in the last line of the memorandum.

8 A. I have read the document.

9 Q. Is this your handwriting, Mr. Justin?

10 A. It does not appear to be. I would say it is
11 not.

12 Q. Do you recall attending a meeting at which
13 these topics were discussed, a meeting at or about July
14 27, 1970?

15 A. I do not recall such a meeting.

16 Q. The handwritten notes in Paragraph A 2 read,
17 "Appoint man to be in charge of this work, Bill Justin",
18 question mark. Were you appointed to take charge of
19 these tasks as suggested by this memorandum?

20 A. I am not sure because I believe what this
21 memorandum is referring to is the complete plan to
22 place the equipment in operation, go into the sewer and
23 the designing and purchasing and such that was
24 associated and when that or those actions was triggered
25 and the equipment was purchased and the installation

1 began there was a question somebody was suggesting
2 possibly I would be the one that would do it.

3 Q. That is, supervise the installation of the --

4 A. Yes.

5 Q. And so your answer to the question, were you
6 appointed to do that as suggested by this memorandum is?

7 A. I don't believe I was because we never
8 reached this point before the plant was shut down.

9 MR. COYNE: Thank you, Mr. Justin. We
10 will resume tomorrow morning at 8:30.

11 (At this time the deposition was recessed
12 and reconvened October 15, 1982 commencing
13 at 8:30 a.m.)

14 BY MR. COYNE:

15 Q. Mr. Justin, since we ended our examination
16 yesterday afternoon have you made further preparation
17 for your testimony today?

18 A. No, I have not.

19 Q. Have you reviewed any documents?

20 A. I looked for the document you asked me about
21 yesterday referring to the filling of the well. It
22 turned out that that was not considered a document as I
23 had considered it. It was a page in the deposition
24 that Mr. Herb Finch had given.

25 Q. So other than that mention of Mr. Finch's

1 testimony, is there any other piece of paper, document
2 or other information that you are aware of which
3 mentions or may pertain to the filling of the Republic
4 deep well?

5 A. I have a recollection of having seen
6 reference to the filling of the well somewhere but I do
7 not recall where or at what time I saw the document.

8 Q. When you say, "Seen reference to it," was
9 this something that was written?

10 A. As I recall it was something I had read, yes.

11 Q. Would that have been the last month or so?

12 A. No.

13 Q. Would it have been during the time when you
14 were employed by the company at Saint Louis Park?

15 A. No, it would not have been.

16 Q. And so it was read by you sometime subsequent
17 to your coming to Indianapolis in 1971?

18 A. That is my recollection.

19 Q. And what would have been the occasion for
20 your reading the document?

21 A. I don't recall why I would have been reading
22 the document.

23 Q. Was it a one page document or was it 50 pages,
24 do you recall?

25 A. I have no recollection of the length of the

1 document.

2 Q. Was it a document written by you?

3 A. No, it would not have been.

4 Q. Was it a document written by a Reilly Tar
5 employee?

6 A. I do not know who wrote the document.

7 Q. Do you believe that it was a document
8 prepared by someone other than a Reilly Tar employee?

9 A. I have no recollection of the source of the
10 document.

11 Q. Was it a business record as opposed to a
12 piece of correspondence or something from someone
13 outside the company, do you recall?

14 A. I cannot recall.

15 Q. Do you believe that you still may be able to
16 find that document?

17 A. If I did I suppose I would have to go through
18 an awful lot of documents.

19 Q. But the document still may be in your
20 possession or available to you if you did make such an
21 investigation?

22 A. I don't know where the document is at this
23 time. It's not in my possession.

24 Q. Would you have read the document in the
25 course of your duties and responsibilities in your

1 current position?

2 A. No, I would probably have read the document
3 in reference to this incident that we are involved in
4 today.

5 Q. Do you mean in the course of your review of
6 records pertaining to this lawsuit?

7 A. Yes.

8 Q. Mr. Justin, I request that you look for that
9 document, make every effort you can to locate the
10 document. It's an important document or it may be an
11 important document with regard to the well which is of
12 interest to us all and I would ask you, Ed
13 Schwartzbauer, to advise us if Mr. Justin is able to
14 locate the document.

15 MR. SCHWARTZBAUER: Sure.

16 BY MR. COYNE:

17 Q. Mr. Justin, I have shown you two documents,
18 the first document is a memo dated September 25, 1970
19 on the interoffice correspondence of Reilly Tar &
20 Chemical Corporation. Have you had time to review that
21 document?

22 A. I have.

23 Q. Is that a memo written by you to Mr. Finch?

24 A. It is.

25 Q. I have also shown you another document, this

1 being a memo of November 9, 1970. Was this a memo
2 written by you to Mr. Hennessy?

3 A. That's correct.

4 Q. This memo is State Exhibit 94. The first of
5 these memos, the September 25, 1970 memo refers to a
6 visit made by you and Mr. Hennessy to the Edens
7 Equipment Company in Kansas City and would you explain
8 what your purpose was in making that visit?

9 A. This was a piece of equipment that we had
10 under consideration to be used in the treatment system
11 that we planned to install at the Saint Louis Park
12 plant. I apparently was becoming involved in the
13 installation or the planning of this treatment system
14 and as a result went with our engineer to this plant to
15 view the operation of the unit. My interest would have
16 been from a maintenance standpoint, ease of operation
17 standpoint, as well as efficiency.

18 Q. And what was Mr. Hennessy's involvement?

19 A. Mr. Hennessy was the engineer that would have
20 been planning the installation. Apparently Mr.
21 Hennessy is the one that had located the piece of
22 equipment.

23 Q. It refers to the equipment as a primary oil
24 separator in the fourth and fifth lines of the memo.
25 In design and operation how did the Eden separator

1 differ from the settling basin then in use at Saint
2 Louis Park?

3 A. The best I can recall it was more
4 sophisticated. It was designed to remove surface as
5 well as settling oil. It was designed so that it could
6 be cleaned while in operation without taking it out of
7 service and I would consider it a more efficient system.

8 Q. Any other differences?

9 A. It had mechanical movements in it where in
10 comparison the separator we had had no mechanical
11 movement to it.

12 Q. Any other differences?

13 A. Well, the differences were considerable, the
14 construction, the configuration of it, the type of
15 baffling and the method of separation differed
16 considerably from the separator we had that was simply
17 one with baffles in it.

18 Q. How did the method of separation differ
19 between the two units comparing the oil separator
20 manufactured by Edens and the units then in operation
21 at Saint Louis Park?

22 A. The only recollection that I have that I can
23 describe to you would be a rotating drum that would
24 pick up surface oil and then this surface oil was
25 removed from the drum by a scraper and carried in a

1 trough over to a collection area. It also, as I recall,
2 had -- I don't know what the correct word would be,
3 moving floats I guess would be the best way I can
4 describe it, that would move the settled oil to a
5 deeper section because the bottom was slanted and
6 sloped, to a collection area where the sells had oil
7 that could be pumped off.

8 Q. The moving floats that you referred to, would
9 that also be known as conveyors?

10 A. I suppose you could describe them as such.
11 As I recall they were basically chain driven with
12 strips of metal running from one side to the other side
13 that would move along the bottom.

14 Q. The rotating drums would remove surface oils
15 did you say?

16 A. Yes.

17 Q. Did the equipment at Saint Louis Park also
18 remove surface oils?

19 A. It would have skimmed surface oils, yes.

20 Q. And then what would be the difference in
21 terms of efficiency between the two units with regard
22 to surface oils?

23 A. The difference was that the oils being
24 removed by the rotating drum, the surface oils, were
25 constantly being removed and conveyed to a separate

1 collection area; whereas, in our separator they were
2 being held and would have to be pumped off at intervals.

3 Q. Now, I think you mentioned also that the Eden
4 separator would remove settling oils, I think is the
5 way you referred to it, is that right?

6 A. Yes.

7 Q. Did the separator at Saint Louis Park also
8 accomplish that?

9 A. Yes.

10 Q. And how was the method different between the
11 two then?

12 A. I can't recall what the difference was in the
13 construction of the two units that accomplished this.

14 Q. Now, you also mentioned that the unit, the
15 Eden separator unit, could be cleaned while in
16 operation. The unit in Saint Louis Park could not be,
17 is that right?

18 A. It could be cleaned while in operation;
19 however, you would not clean it while you had a
20 continuous flow going through it. You would have to
21 shut off the flow and then pump the settled oils out or
22 pump the surface oils out in order not to disturb the
23 operation of the system and stir it up. Whereas, the
24 Eden separator was constantly removing the oil that it
25 collected.

1 Q. So in order to clean the unit at Saint Louis
2 Park you had to divert the flow from going through the
3 unit so that it could be cleaned?

4 A. We just would simply not pump into the unit
5 during that period of time.

6 Q. And what did you do with the wastewater
7 during the period that the separator then was being
8 cleaned if the flow was not through the separator?

9 A. Well, as I recall, there was a surge system
10 capable of holding a small amount of water during that
11 period of time so water was not diverted around the
12 separator while we were cleaning it out. My water, for
13 instance, that I pumped was pumped at intervals from
14 the holding tank or the wet cut tank. Other water that
15 went through that separator was pumped at intervals, it
16 was not a continuous flow through it.

17 Q. So you are speaking of the wood treating
18 operation then as having itself some sort of surge
19 system?

20 A. Apparently so because my recollection of the
21 operation of the separator was that there was a pump in
22 a sump and it operated intermittently.

23 Q. So if I understand you correctly, the flow
24 into the settling basin at Saint Louis Park could be
25 stopped, the unit cleaned and then the flow through the

1 unit resumed without bypassing or diverting any
2 additional flow into the wastewater system?

3 A. That is my recollection.

4 Q. How often was that unit cleaned at Saint
5 Louis Park?

6 A. I do not recall.

7 Q. Do you recall it ever being cleaned within
8 the two years that you were there?

9 A. I don't recall any specific instances but I
10 am sure that we would have pumped the oil out of it at
11 intervals. You would have to.

12 Q. Why would that be necessary?

13 A. That was the way it operated. As you
14 collected oil you periodically pumped it out.

15 Q. What would happen if you didn't pump it out
16 routinely or regularly?

17 A. It would fill up with oil and oil would carry
18 over and out of the unit. It would not be
19 accomplishing it's designed job.

20 Q. So at that point, if that did occur, that is
21 the oils were allowed to accumulate, the unit would
22 have individually no efficiency at all with regard to
23 removing oils then?

24 A. That's correct.

25 Q. I think you mentioned also that the Eden

1 separator had mechanical movements. Would you explain
2 what that was and how that compared to the unit at
3 Saint Louis Park?

4 A. As I said previously, the rotating drum, what
5 I would consider a mechanical movement, the floats at
6 the bottom of the unit that moved slowly I would
7 consider a mechanical movement; whereas, the separator
8 that we had had stationary baffles in it.

9 Q. The baffles, let's focus on that for a minute.
10 Did the baffles move in the Eden separator, if I
11 understand you correctly?

12 A. No, I don't recall baffles moving. I am
13 saying, the floats move the oil down the bottom slope
14 as it settled forcing it into a sump on the bottom of
15 the separator.

16 Q. I think you also mentioned that the type of
17 baffling was different, is that right, between the two
18 units?

19 A. It would have been.

20 Q. What would the difference have been?

21 A. I don't recall what the difference would have
22 been.

23 Q. Was it a difference in the construction of
24 the baffles?

25 A. Well, there was no similarity between the two

1 units that I could describe and, as I say, I don't
2 recall what the Eden separator configuration was other
3 than what I have already stated.

4 Q. I may have misheard you. Did you say there
5 was no similarity with regard to the baffles?

6 A. I would say there was no similarity.

7 Q. Would you explain that with regard to the
8 baffles?

9 A. As I said, I can't explain that because I
10 don't recall the configuration of the Eden separator
11 other than what I have explained. I do recall the
12 shape of it and due to the mere fact that it had moving
13 floats on the bottom and the rotating drum on the
14 surface, the bottom was sloped, the separators in the
15 Eden separator would have had to have been of some
16 different configuration than the ones we were using.

17 Q. How many separators were there? How many
18 chambers were there in the Eden separator?

19 A. I do not recall.

20 Q. And the separator in use at Saint Louis Park?

21 A. I do not recall.

22 Q. You mentioned pumping oil from the separator
23 at Saint Louis Park. Where would the oil that was
24 pumped go when it was pumped from the separator?

25 A. It would have been pumped back to creosote

1 oil storage.

2 Q. And where was that storage tank? Was it a
3 particular storage tank that was in use for that
4 purpose?

5 A. I don't recall which tank they would pump it
6 back to.

7 Q. But you are confident that the oil would be
8 pumped back to a storage tank?

9 A. Yes.

10 Q. Now, the oil that was pumped to storage would
11 have been pumped from the top or the bottom of the
12 separator?

13 A. Both.

14 Q. So both oil at the top as well as oil at the
15 bottom would have been pumped to the same storage tank
16 for the same use?

17 A. I don't know.

18 Q. Well, do you believe that to have been the
19 case or likely to have been the case?

20 A. I don't know.

21 Q. Do you have any reason to doubt that that
22 would have been the case?

23 MR. SCHWARTZBAUER: That what would have
24 been the case?

25 BY MR. COYNE:

1 Q. That top oil and bottom oil from the
2 separator would have been pumped to the same tank for
3 the same use?

4 MR. SCHWARTZBAUER: That's repetitious.
5 He said he didn't know.

6 MR. COYNE: You may answer.

7 MR. SCHWARTZBAUER: No, he may not.

8 MR. COYNE: Are you instructing the
9 witness not to answer?

10 MR. SCHWARTZBAUER: Yes.

11 MR. SHAKMAN: I don't think he answered
12 that. We will have the Court Reporter read it back.

13 (Whereupon the requested portion of the
14 record was read by the Court Reporter.)

15 BY MR. COYNE:

16 Q. Was there an oil phase at the top of the
17 separator?

18 A. Yes.

19 Q. Was there an oil phase at the bottom of the
20 separator?

21 A. Yes.

22 Q. Where did the oil phase pump to from the top
23 oil phase?

24 A. I don't know.

25 Q. You don't know where the surface oils would

1 have been pumped to, is that right?

2 A. I do not know where the surface oils would
3 have been pumped to.

4 Q. And do you know whether or not they were
5 pumped to storage?

6 MR. SCHWARTZBAUER: That's repetitious.
7 Don't answer it.

8 BY MR. COYNE:

9 Q. You previously said that the surface oils
10 were pumped to storage and now you are saying you don't
11 know whether surface oils were pumped to storage. Do
12 you know or don't you know?

13 MR. SCHWARTZBAUER: How many times can
14 he say he doesn't know?

15 MR. COYNE: He has contradicted himself.

16 MR. SCHWARTZBAUER: He has told you at
17 least seven or eight times he doesn't know. Once he
18 said I don't know --

19 MR. SHAKMAN: Not when he has previously
20 contradicted himself. That's an inconsistency that we
21 are entitled to inquire into.

22 BY MR. COYNE:

23 Q. So if I understand your testimony, you don't
24 know whether or not the surface oils were pumped to
25 storage or not?

1 A. The surface oils would have been pumped to
2 storage.

3 Q. The oils at the bottom of the separator,
4 would they also have been pumped to storage?

5 A. They would have been pumped to storage.

6 Q. Was there also a sludge or accumulation in
7 the bottom of the separator?

8 A. I don't know.

9 Q. Do you have any reason to believe that that
10 would have been the case, that there would have been an
11 accumulation of that kind?

12 A. I am having a problem with your definition of
13 what sludge is and what I may consider sludge.

14 Q. What do you consider to be sludge?

15 A. I would consider sludge to be dirt, solids,
16 this type of material.

17 Q. Was there any build up of solids in the
18 settling basin?

19 A. I don't know.

20 Q. Would you believe that there would have been?

21 A. It would be possible.

22 Q. Would you expect it to be the case?

23 A. I would expect some sludge to build up in the
24 bottom of the unit.

25 Q. And what was done with that sludge?

1 A. I do not know.

2 Q. The last paragraph of the memo refers to
3 subsurface liquids and the full sentence reads, "Since
4 this unit is a primary separator it would not remove
5 any suspended oil contained in a subsurface liquid."
6 What was the "suspended oil"? Is that the same as an
7 emulsified oil as you use the term here?

8 A. I am not sure what my thoughts were at that
9 time of what suspended oil would be.

10 Q. What are suspended -- go ahead.

11 A. I would not think of it as emulsified oil.

12 Q. How best can you explain this paragraph? It
13 continues to say, "In order to determine if we have a
14 problem with this layer we will test a sample of the
15 subsurface oil for oil content at 10, 20 and 30 minutes
16 of standing." What was the purpose of that test?

17 A. If I answer I will only be speculating.

18 Q. Well, the best as you can recall what you
19 meant when you wrote this?

20 MR. SCHWARTZBAUER: Don't speculate.

21 BY MR. COYNE:

22 Q. To the best of your recollection what was the
23 purpose of the test that you proposed to be conducted
24 here?

25 A. The purpose of the test was to determine how

1 our material settled and separated and over what period
2 of time it took for it to separate and what the
3 concentrations at various levels would be at that time
4 interval.

5 Q. How was that important to you?

6 A. In order to determine if this Eden separator
7 would perform the job that we expected it to.

8 Q. The next sentence reads, "In addition we will
9 have to have a committment from the city as to how many
10 parts per million of oil we will be allowed to
11 discharge." Did the city ever make such a commitment
12 to you or to the company?

13 A. I do not recall whether they did or not.

14 Q. I refer you now to the second exhibit that I
15 have shown you, that's Minnesota 94, a memo written
16 about six weeks later. Was this memo written by you to
17 Mr. Hennessy?

18 A. It was.

19 Q. Have you had the opportunity to read through
20 this document?

21 A. I have.

22 Q. To the best of your recollection are the
23 facts set forth in the memo true and correct?

24 A. Yes.

25 Q. You will note in the middle of that first

1 paragraph it reads, "These samples were then submitted
2 to Twin City Testing for the purpose of determining oil
3 content and the results are," and then there are some
4 results described. Were there any analysis done other
5 than for oil?

6 A. I can't recall.

7 Q. Do you have any reason to believe there were
8 other analysis done in addition to the one done for oil
9 here?

10 A. Based on the report that I wrote in this
11 letter I would have no reason to believe there were
12 other tests performed.

13 Q. The first paragraph concludes, "We will be
14 able to meet the city's requirements of a maximum of
15 100 parts per million oil." Was this a city standard
16 or requirement?

17 A. It would appear that it was.

18 Q. And who advised of that standard, that is,
19 who in the city advised that the standard be 100 parts
20 per million oil?

21 A. I cannot recall.

22 Q. Was there any standard other than the 100
23 parts per million oil established by the city?

24 A. I cannot recall at this time.

25 Q. Would this have been an effluent standard for

1 discharge to the sewer line?

2 A. I do not know whether this was a standard for
3 discharge to the sewer line or a standard for discharge
4 to the storm water line. Since we were considering
5 going into the sanitary sewer I would suspect this is
6 the standard for going into the sanitary sewer.

7 Q. In addition to this standard, which is
8 attributed to the city, was there a standard set by the
9 state?

10 A. I cannot recall at this time.

11 Q. Or by the U.S.?

12 A. I cannot recall at this time.

13 Q. The next paragraph, the final paragraph in
14 this memo, refers to a Number 27 storage tank which is
15 quote, "Our wet cut storage tank," unquote. Is that
16 the storage tank to which you earlier testified which
17 was used to hold the wet cut for a period of time to
18 allow it to settle, is that the same tank?

19 A. That is correct.

20 Q. The memo then continues on to describe a
21 sampling of the flow from this storage tank. Would you
22 explain the sampling that you did and the reasons you
23 did it this way?

24 A. I do not recall the incident.

25 Q. Apart from specifically recalling this

1 individual incident, what would have been the purpose
2 for sampling the flow from the Number 27 storage tank?

3 A. I don't know what our reasons were for
4 sampling the storage tank that is referred to in this
5 memo.

6 Q. If you can recall, yesterday you testified
7 with regard to a flow sheet for refinery operations and
8 in the 1960's, one prepared by Mr. Leshner, do you
9 recall that? It was in the answers by Reilly Tar to
10 the State's interrogatories an Appendix D. Do you
11 recall having seen this flow sheet which is Appendix D?

12 A. Yes, I do.

13 Q. The flow that is referenced in this final
14 paragraph of Minnesota Exhibit 94, is that the same
15 flow as noted here as decant water on this Appendix D?
16 This is the decant water shown coming off of the wet
17 cut in this flow sheet.

18 A. Yes, it would be.

19 Q. As I understand, in the last line of this
20 memorandum the average then of the flows of this decant
21 water from Number 27 storage tank was an average of
22 approximately 5,500 parts per million oil, is that
23 right?

24 A. That would be correct for this particular
25 test that was run.

1 Q. Now, you said, "For this particular test that
2 was run," would you expect some variation?

3 A. Possibly.

4 Q. And what would be the basis for that
5 variation?

6 A. If the system were not operated the same way
7 that it was operated when this sampling was done, for
8 instance, if you allowed the material to stand in the
9 tank for a longer period of time it would affect the
10 concentration.

11 Q. Do you have any reason to believe that this
12 5,500 parts per million average was a typical or
13 unusual or not ordinarily the case with regard to flow
14 from the Number 27 storage tank to the separator?

15 A. I would consider it typical.

16 Q. I would now like to refer you to another
17 exhibit.

18 (At this time State of Minnesota Deposition
19 Exhibit 108 was marked for identification by
20 the Court Reporter.)

21 BY MR. COYNE:

22 Q. Is this memo of October 6, 1970 a memo
23 written by you to Mr. Finch?

24 A. It is.

25 Q. Your visit then to the North America Car

1 Corporation followed your visit to Kansas City by
2 approximately two weeks. You will note that the Kansas
3 City visit was made on September 24, 1970 and this
4 visit was made on October 5, 1970. Were you the only
5 one to make this visit then to the North America Car
6 Corporation?

7 A. That is correct.

8 Q. Were you well satisfied with the performance
9 of the unit at the visit to the North America Car
10 Corporation?

11 A. My recollection is that I was.

12 Q. And then did you recommend the installation
13 of the unit?

14 A. I submitted this report, if you would
15 consider that a recommendation then, yes, I was
16 recommending the use of the unit.

17 Q. Was it subsequently approved by management
18 for installation?

19 A. I don't recall how far we progressed with the
20 plans to install this unit and the system.

21 Q. How far along the progression can you recall
22 and what do you recall? Or asked another way, what
23 happened next?

24 A. I believe the final result was that before we
25 could implement a plan the decision was made to cease

1 operations at the plant.

2 Q. Did Mr. Hennessy agree with you that the Eden
3 separator was satisfactory?

4 A. I do not recall.

5 Q. Do you have any reason to believe he did not
6 agree with you?

7 A. I have no reason to believe that he did not
8 agree with me.

9 Q. And did Mr. Leshar agree with you?

10 A. I do not recall.

11 Q. Do you have any reason to believe that he
12 would have disagreed with you?

13 A. I have no reason to believe that he would
14 have disagreed with me.

15 Q. And I would now like to show you another
16 memorandum, this one dated October 14, 1970.

17 (At this time State of Minnesota Deposition
18 Exhibit 109 was marked for identification by
19 the Court Reporter.)

20 A. I have read the document.

21 Q. Is this a copy of a memorandum written by you
22 to Mr. Finch?

23 A. It is.

24 Q. Whose handwriting appears at the bottom of
25 the memo?

1 A. That is my handwriting.

2 Q. The footnote reads, "Mr. Kosa also told per
3 Fredrick that if we were engaged in a study and program
4 to develop controls the state would postpone action
5 against us." Is that right?

6 A. You used the word "per". That should be "Mr.
7 Fredrick" rather than "per".

8 Q. Thank you. I should have asked to you read
9 your own handwriting.

10 A. Would you restate that question, please?

11 Q. Well, I was making an effort to read your
12 handwriting and i am glad that you corrected me. As
13 corrected, is that what that handwritten note at the
14 bottom of the page reads?

15 A. That is correct.

16 Q. Now, Mr. Fredrick to whom you made reference
17 in your footnote and also in your memo beginning on the
18 first line of the memo of Pollution Curbs, what was Mr.
19 Fredrick's role?

20 A. I don't recall what his role or title would
21 have been with the company. The purpose of this survey
22 was to determine the emissions from our receiving pan
23 vent discharge.

24 Q. So, if I understand you correctly, the
25 concern of Pollution Curbs was with air emissions then,

1 is that right?

2 A. That is correct.

3 Q. Were they also consulted with regard to the
4 oil water separator, the primary separator, the Eden
5 separator and matters associated with the wastewater?

6 A. I do not recall any such discussions.

7 Q. Do you believe that they would have consulted
8 with the company with regard to the wastewater as well
9 as the air?

10 A. I have no reason to believe that they would
11 have.

12 Q. So as far as you know they were consultants
13 other air issues only?

14 A. Yes.

15 Q. And Mr. Tibor Kosa, do you know who he is?

16 A. I do not recall Mr. Kosa.

17 Q. Although you do say he worked with the state
18 Pollution Control Agency, and I can represent to you in
19 fact he was a member of the air quality staff at the
20 agency at that time, do you recall having met with Mr.
21 Kosa? I refer you now to the middle of that paragraph
22 which reads, "Apparently Mr. Kosa misunderstood us in
23 our meeting of October 13, 1970 in your office"?

24 A. I do not recall that specific meeting.

25 Q. The memo continues, "It was my understanding

1 that we had explained to Mr. Kosa that we were studying
2 a proposal by Pollution Curbs and not that we had
3 already retained them for our study. Mr. Kosa, while
4 talking to Mr. Fredrick, stated that they had some
5 specific ideas as to what we would have to do in order
6 to curb our pollution and Mr. Fredrick advised him that
7 with the approval of our company he would be happy to
8 sit down with them and discuss the situation, remedies
9 and the course of action he wanted me to take. Mr.
10 Fredrick has agreed to supply me with a letter
11 regarding the substance of the conversation we had over
12 the telephone concerning this matter." Do you recall
13 if Mr. Fredrick did then followup with a letter?

14 A. I do not recall.

15 Q. Do you recall anything of the meeting other
16 than as memorialized here in your memorandum?

17 A. I can recall nothing of the meeting other
18 than what I read here in this memorandum.

19 Q. Do you recall any other conversations with
20 Mr. Kosa?

21 A. I cannot recall any at this time.

22 Q. The memo, as we earlier referenced, has this
23 handwritten note at the bottom and it apparently
24 reports Mr. Fredrick's conversation with Mr. Kosa. Is
25 that your understanding of the note at the bottom?

1 That was not a conversation to which you were a party,
2 is that right?

3 A. I may have misunderstood you but I think you
4 reversed the relationship of the conversation. Could
5 you restate that question?

6 Q. Rather than my trying to summarize what the
7 last few lines of this memorandum mean, would you just
8 tell me what you meant by the note at the bottom?

9 A. I was relaying what Mr. Kosa had told me in a
10 telephone conversation apparently, or rather what Mr.
11 Fredrick told me that Mr. Kosa had told him and that
12 was that Mr. Kosa had told Mr. Fredrick that if Reilly
13 Tar & Chemical engaged Pollution Curbs in a study and
14 program to develop controls that the state would
15 postpone action against Reilly Tar and Chemical.

16 Q. The controls you mentioned would have been
17 air emission controls, is that right?

18 A. That is my understanding.

19 Q. And the action, what action would that have
20 been?

21 A. I can't recall what action that was in
22 reference to.

23 Q. I have another memorandum, this one dated
24 approximately two weeks later, November 2, 1970.

25 (At this time State of Minnesota Deposition

1 Exhibit 110 was marked for identification by
2 the Court Reporter.)

3 A. I have read the document.

4 Q. Is this a memo written by you to Mr. Finch?

5 A. It is.

6 Q. Are the facts accurate as set forth in the
7 memo to the best of your recollection today?

8 A. Yes.

9 Q. The 5th line of the memorandum refers to
10 phenol determinations. Were any analysis done other
11 than for phenols?

12 A. I have no reason to believe that they were.

13 Q. The memo refers to some sampling points in
14 the first paragraph and references in Minnesota
15 Pollution Control Agency Report of April 16, 1970.
16 Previously Reilly Tar & Chemical has introduced a
17 document, it's a document which is dated April 1970,
18 it's a report by the Minnesota Pollution Control Agency
19 Division of Water Quality. It includes a sketch map of
20 Republic Creosoting Company and that is Page 350031 one
21 and it has sampling points shown on the map. Would you
22 take a look at this report and the attached map and the
23 question is whether you believe that those are the same
24 sampling points, those five sampling points, referenced
25 in the first paragraph of the memo would correspond to

1 the sampling points shown on that page of your report?

2 A. May I read the report first?

3 Q. Sure.

4 (At this time a discussion was held off the
5 record.)

6 A. I have read the document and am presently
7 viewing the map that you asked me to observe.

8 Q. And you believe those are the five sampling
9 points to which you refer in the first paragraph of the
10 memo would be the same sampling points as indicated in
11 the April 1970 Minnesota Pollution Control Agency
12 report?

13 A. The reference in my letter is referencing a
14 Pollution Control Agency report of April 16. The
15 report I am looking at simply says April 1970.

16 Q. I think, Mr. Justin, if you also will look
17 further following the fifth page of the memorandum
18 there are some analytic data reported?

19 A. Yes. I believe the point noted on this map
20 would be the same point referenced in my letter of
21 November the 2nd, 1970.

22 Q. Thank you. Would the phenol content of -- at
23 different points vary depending upon factors such as
24 rainfall or sampling methodology, analytic process and
25 other factors?

1 A. I would expect it to, yes.

2 Q. The second paragraph of the November 2, 1970
3 memorandum refers to additional samples being taken and
4 the full first sentence reads, "On October 16, 1970 Mr.
5 Ward Barton and myself obtained samples of water from
6 four lakes or ponding areas in the general vicinity of
7 our plant, as you had outlined to us previously." What
8 had Mr. Finch outlined to you previously?

9 A. Mr. Finch had requested that I take samples
10 from various surface waters at specific points which he
11 specified.

12 Q. The purpose in doing so?

13 A. The purpose was to determine what the natural
14 background level of phenols would be in areas or lakes
15 in the surrounding area.

16 Q. And what prompted this interest?

17 A. I do not know what prompted the interest.

18 Q. Do you know what use was made of this
19 information with regard to samples obtained from the
20 lakes and ponding areas?

21 A. I do not know what use if any was made of it.

22 Q. I would like to refer you to another exhibit,
23 this is a memorandum of November 27, 1970.

24 (At this time State of Minnesota Deposition
25 Exhibit 111 was marked for identification by

1 the Court Reporter.)

2 BY MR. COYNE:

3 Q. Let me also show you, in conjunction with the
4 November 27, 1970 memorandum that has been marked as
5 Minnesota 111, "Pollution Abatement and Control in the
6 Wood Preserving Industry," this is a bound volume
7 prepared by Mississippi State University, and ask you
8 to look at this document in conjunction with Minnesota
9 111 and we can take a break at this point.

10 (At this time State of Minnesota Deposition
11 Exhibit 112 was marked for identification by
12 the Court Reporter.)

13 BY MR. COYNE:

14 Q. Mr. Justin, I have marked the "Pollution
15 Abatement and Control in the Wood Preserving Industry"
16 publication as Minnesota Exhibit 112. Referring to the
17 memorandum of November 27, 1970, is that a memorandum
18 written by you to Mr. Finch?

19 A. It is.

20 Q. It recounts your attendance at a pollution
21 control meeting of November 1970. Is this the same
22 meeting to which you make reference in your resume'
23 which has been marked as Minnesota Number 100? It
24 notes, "1970 Mississippi State University Pollution and
25 Abatement Control Symposium"?

1 A. Yes, it would be the same one referred to in
2 my resume'.

3 Q. The memo of November 27, 1970 is your
4 memorandum of that meeting, is it not?

5 A. That is correct.

6 Q. I would like to refer you to the second page
7 of the memorandum. The first full sentence reads, :
8 "Since the symposium covered approximately 14 hours of
9 presentations and since a complete publication of the
10 proceedings would be published in approximately four
11 month I will not attempt to cover the meeting in detail,
12 rather, I would like to convey to you the following
13 impressions and observations that I obtained from the
14 meeting." I have handed you what has been marked
15 Minnesota Number 112, the publication. Do you
16 recognize this as the complete publication to which you
17 make reference in your memo?

18 A. Yes, I do.

19 Q. After the conference did you in fact receive
20 this publication?

21 A. Yes, I did.

22 Q. And I now refer you to Paragraph 5 on the
23 second page of the memorandum. It reads, "All the of
24 the methods discussed in abating water pollution
25 incorporated one necessary piece of equipment, and this

1 was a effective primary separator. I therefore feel
2 that this one piece of equipment stands very little
3 chance of becoming obsolete in any future facilities
4 installed in our plants, and should be the first step
5 taken in water pollution abatement, along with good
6 plant cleanup. The effluent from this separator would
7 then be channeled to secondary treatment equipment."
8 Was the Eden separator then under consideration by the
9 company to be the sort of effective primary separator
10 to which you refer in this paragraph?

11 A. I have reason to believe that I probably had
12 the Eden separator in mind when I made the statement in
13 this report.

14 Q. Would the settling basin then in use in Saint
15 Louis Park have been the sort of effective primary
16 separator to which you make reference?

17 A. I believe I stated that the separation
18 equipment that I had in mind that I made reference to
19 in Paragraph 5 would be the Eden separator.

20 Q. As distinguished there the settling basin
21 then in use at Saint Louis Park?

22 A. Yes.

23 Q. In addition to recommending a primary
24 separator, did you also recommend secondary treatment
25 for Saint Louis Park?

1 A. I do not recall making any specific
2 recommendations for secondary treatment.

3 Q. The question that I have refers to the final
4 sentence of your Paragraph Number 5 which reads, "The
5 effluents from this separator would then be channeled
6 to secondary treatment equipment." The question is,
7 what you did you mean by that?

8 A. I meant that as time went on and it was
9 necessary to upgrade a system, that the upgrading that
10 would follow would be secondary treatment and
11 additional equipment installed.

12 Q. So that you contemplated installing some
13 additional secondary treatment after installation of
14 the Eden separator?

15 A. I had in mind that if further treatment were
16 necessary that this piece of equipment would not become
17 obsolete and that any future treatment methods that
18 were necessary could be incorporated downstream from
19 this piece of equipment.

20 Q. By "downstream" you mean?

21 A. As an addition to the separator, if it became
22 necessary to treat further.

23 Q. What was your basis to believe that that
24 might be an eventuality to provide secondary treatment?

25 A. Discussions were going on at that time or

1 rather information was being presented at that time by
2 various agencies that somewhere down the line more
3 stringent regulations would be imposed that would
4 require treatment systems with more efficiency than
5 would be affected from the use of a separator.

6 Q. If I understand you correctly then, it was
7 your opinion that the Eden separator would meet present
8 day or then present day requirements and that secondary
9 treatment might be necessary in the future to meet
10 future standards, is that right?

11 A. Yes.

12 Q. I now direct your attention to the seventh
13 paragraph which begins at the bottom of the second page
14 and concludes at the top of the third page and note
15 that at the top of the third page the memorandum
16 continues, "We will in the future be required to clean
17 our water beyond the present state standard." The
18 question is, what was then the present state standard?

19 A. I do not recall.

20 Q. What did you mean by "the present state
21 standard"?

22 A. Apparently I was aware of some state standard
23 and I was comparing that to some limitations that had
24 been discussed in this meeting that were considered to
25 be future possibilities.

1 Q. Would that have been a state effluent
2 standard?

3 A. I do not recall.

4 Q. Would it have been a water standard as
5 opposed to an air pollution standard?

6 A. Based on the subject matter contained in this
7 report I have every reason to believe it would be a
8 water standard.

9 Q. It would be a standard then for discharge
10 either to a body of water or to a sewer, is that
11 basically your understanding?

12 A. At that point in time the standards for
13 discharge into navigable waters. I don't believe
14 standards were being discussed at that point in time
15 for discharge into sanitary sewers.

16 Q. At this time though, if I understand you
17 correctly, the plan of the company was to connect its
18 wastewater stream to the city sewer as opposed to
19 discharging it to the Minnehaha Creek or some other
20 body of water, is that right?

21 A. That is correct.

22 Q. I now would like to refer you to an
23 additional exhibit, this exhibit is dated December 23,
24 1970 and it has been marked as Minnesota Exhibit Number
25 113.

1 (At this time State of Minnesota Deposition
2 Exhibit 113 was marked for identification by
3 the Court Reporter.)

4 BY MR. COYNE:

5 Q. Have you read the memorandum?

6 A. I have read the memorandum.

7 Q. This appears to be a memorandum from Mr.
8 Hennessey to Mr. Finch with a copy to you, is that
9 correct?

10 A. That is correct.

11 Q. The subject matter of the memorandum is the
12 plant sewer. What was your participation with regard
13 to the planning for the plant sewer at Saint Louis Park?

14 A. I don't recall at this time my particular
15 involvement with the installation of the sewer.

16 Q. Was this work being done in conjunction with
17 the Eden separator?

18 A. It would have been.

19 Q. And this work order, would that have been a
20 work order associated with the Eden separator, do you
21 know?

22 A. The Eden separator would have been a part of
23 the equipment included in this work order.

24 Q. The memo references separating contaminated
25 water from clean water in the boiler house and treating

1 room. Which water was contaminated and which water was
2 clean?

3 A. I do not recall.

4 Q. What would be the purpose of separating that
5 water?

6 A. Clean water could be discharged to a storm
7 system without having to go through a treatment system.

8 Q. The third paragraph of this memorandum reads
9 with regard to contaminated waste from the treating
10 building and boiler house. How would water become
11 contaminated in the boiler house?

12 A. Where do you see contaminated waste?

13 Q. The second full sentence in the third
14 paragraph reads, "It is my understanding contaminated
15 waste from the treating building and the boiler house
16 can be pumped into this line."

17 A. And what was your question?

18 Q. What contaminated waste originated in the
19 boiler house?

20 A. I can't think of any unless they are
21 considering the blow down from the boiler as being
22 contaminated.

23 Q. In addition to boiler blowdown you know of no
24 other source of contamination of the boiler house?

25 A. No, sir, I do not.

1 Q. During the period while you were at the plant
2 site?

3 A. Not that I recall.

4 Q. I now refer you to an additional exhibit,
5 this exhibit is an exhibit dated April 30, 1971 and is
6 being marked as Minnesota Exhibit Number 115.

7 (At this time State of Minnesota Deposition
8 Exhibit 115 was marked for identification by
9 the Court Reporter.)

10 BY MR. COYNE:

11 Q. Have you read the memorandum?

12 A. I have.

13 Q. It is a copy of a memo sent by Mr. Leshner to
14 you, is it not?

15 A. It is.

16 Q. It refers to a memorandum of April 27, 1971
17 in which you inquired of the status of the above
18 applications. The effluent discharge permits to which
19 this memo refers, were those federal permits?

20 A. I do not recall.

21 Q. Were you aware of making application for any
22 permits in addition to federal permits?

23 A. When?

24 Q. In 1971, April.

25 A. I can't recall making applications for any

1 specific permits at this time.

2 Q. Do you recollect your involvement and
3 discussions or preparations to secure permits?

4 A. I do not recall any specific involvement.

5 Q. Do you recall any general involvement?

6 A. I was generally involved in any permitting
7 that had to deal with the refinery. It would be my
8 responsibility to gather information. At this
9 particular time Mr. Hennessy was handling the
10 permitting procedures.

11 Q. When you say he was handling the permitting
12 procedures, was he then responsible for the permits
13 pertaining to the Saint Louis Park facility?

14 A. He was handling the permitting procedures
15 under the Corps of Engineer permitting regulations for
16 discharge into waterways.

17 Q. Was that his only area of responsibility was
18 with regard to the Corps of Engineer permits?

19 A. To the best of my recollection that was the
20 only type of permitting he was involved in.

21 Q. Apart from the Federal Corps of Engineer
22 permits, were you aware of any other permit
23 applications for the Saint Louis Park facility?

24 A. I am vaguely aware of other permits that we
25 had for the facility.

1 Q. Any State of Minnesota permits?

2 A. I do not recall whether they were State, City
3 or Federal permits.

4 Q. Were you aware of any other applications
5 being made in 1971 other than for a Corps of Engineers
6 application or permit?

7 A. I can't recall any, and I should state that I
8 am not sure that this memorandum we are now discussing
9 is making reference to the Corps of Engineer
10 applications.

11 Q. Although you do recall Mr. Hennessy's
12 involvement at that time?

13 A. I do not recall the specific time that he was
14 involved. I recall that he was involved in it.

15 Q. Would it have been in approximately 1970 or '71
16 that time frame?

17 A. I believe it would have been but I am not
18 absolutely sure.

19 Q. I would like to refer you to another
20 memorandum. This memorandum has previously been
21 introduced as State of Minnesota Exhibit 32 B. Have
22 you had the opportunity to read this memorandum?

23 A. I have.

24 Q. Is this memorandum written by you

25 A. It is.

1 Q. Are the facts set forth in the memorandum
2 accurate to the best of your recollection?

3 A. Yes, they are.

4 Q. The memorandum in the second paragraph refers
5 to a Number 4. Would you locate that tank using the
6 mylar exhibit on the wall which is State of Minnesota
7 Exhibit 9?

8 A. I am not sure which tank I was referring to.
9 There is a tank on here designated as Number 4 but I
10 don't know if that's the tank I was referring to on
11 this memo.

12 Q. The Number 4 that's indicated here is not
13 north and the west of the treating room, is that right?

14 A. That is correct.

15 Q. The tank that you referred to in the general
16 vicinity of tank Number 4 as it's shown on the mylar.
17 I note that the tank Number 4 shown on the mylar is
18 shown between the treating room and the Adzing and
19 boring mill?

20 A. The one you have marked as Number 4 would be
21 in the general area of which we are discussing in the
22 area.

23 Q. What was tank Number 4 used for?

24 A. I do not know.

25 Q. You say in your memorandum that, "This area

1 around the base of Number 4 tank is in need of clean
2 up." What needed to be cleaned up?

3 A. I do not recall.

4 Q. How would such a clean up be accomplished?

5 A. Mr. Barton would simply have assigned a
6 worker to clean up the area.

7 Q. And what would be done in the course of the
8 clean up?

9 A. Whatever materials that we are referring to
10 there and that caused us to decide the area needed to
11 be cleaned up would have been removed from the area.

12 Q. Was it the practice then, when a clean up was
13 done, to remove the material as opposed to covering the
14 material over?

15 A. I would say at this period of time, yes.

16 Q. In earlier periods of time?

17 A. I do not know.

18 Q. The second full paragraph continues to refer
19 to the Wheeler area. Would you describe the appearance
20 of that area?

21 A. As stated in this or from my recollection?

22 Q. Both.

23 A. It states in the memo that we also toured the
24 Wheeler area and reached a unanimous conclusion that it
25 looked like a disaster area which could reflect on us.

1 Recalling the Wheeler area, it was probably needless
2 that I am referring to rather than contamination. They
3 had a habit of stacking their material helter skelter
4 and it did not look neat.

5 Q. Where was the Wheeler area, if you can again
6 refer to State of Minnesota mylar map, Exhibit Number 9?
7 Off the record.

8 (AT this time a discussion was held off the
9 record.)

10 BY MR. COYNE:

11 Q. Mr. Justin, would you refer us to the map and
12 identify the Wheeler area or areas?

13 A. As I recall, there were two areas; the main
14 area would have been the one in the area that is
15 labeled "Wheeler garage". A secondary area would have
16 been one in the southeast corner of our plant property,
17 which would have been east of the tar cistern and south
18 of the main road going into the plant.

19 Q. Your memorandum continues in the third
20 paragraph, "The next area toured was the refinery. We
21 first noted the area around the tanks at the north end
22 of the refinery and the old incinerator in the old
23 refinery. Both areas were marked for clean up." What
24 was the clean up done in these areas?

25 A. I cannot recall at this time.

1 Q. Would that have been removal or would that
2 have been covering the material?

3 A. It would have been removal.

4 Q. You will note the next sentence reads, "The
5 next area listed for clean up was at the south end of
6 the new pitch bay," and describes filling in certain
7 holes caused by settling the dirt into the remaining
8 trenches. So there the term "clean up" is associated
9 with some filling activities as the followup action to
10 be taken, is that right?

11 A. Yes.

12 Q. The final paragraph reads, "We also noted
13 that an area southwest of the cistern in the lumber
14 yard where creosote oil, which had been removed from
15 the blow off tank, was being dumped." Which blow off
16 tank was this?

17 A. I do not know.

18 Q. Was there a blow off tank in the vicinity of
19 the cistern?

20 A. Now, if you are referring to the tar cistern,
21 no.

22 Q. What other cistern was there?

23 A. Apparently there was another cistern of some
24 type located in the creosoting area but I do not recall
25 anything about this.

1 Q. What would be the basis for you to conclude
2 there was a second cistern in the treating area?

3 A. Based on what I am reading in my memo.

4 Q. What is it that is the basis for your
5 recollection of this cistern in what you read here?

6 A. It makes a statement that we noted an area
7 southwest of the cistern in the lumber yard. The
8 lumber yard was not located in the area of the tar
9 cistern.

10 Q. Where was the lumber yard?

11 A. The lumber yard was located in the treating
12 plant area. I don't know what specific area I would be
13 referring to as the lumber yard.

14 Q. There is an area shown to the north of the
15 treating or retort area, it's an area described as "untre
16 crosstie storage area", would that be the area he was
17 speaking of?

18 A. I do not know.

19 Q. Was the lumber yard to the north of the
20 retorts?

21 A. I don't know.

22 Q. When you refer to the lumber yard, was there
23 more than one lumber yard?

24 A. I don't know.

25 Q. So you don't know whether there was one

1 lumber yard at the site or several lumber yards at the
2 site, is that your testimony?

3 A. That is correct.

4 Q. But you do believe that the cistern referred
5 to here is not the cistern located and identified as a
6 tar cistern on our mylar map?

7 A. That is correct.

8 Q. Was there a blow off tank in the retort area?

9 A. There was a tank that was referred to as a
10 blow off tank somewhere in the treating plant area, I
11 do not know its exact location.

12 Q. What was its use?

13 A. I do not know.

14 Q. There was no other blow off tank other than
15 the one to which you are now referring?

16 A. I do not know.

17 Q. Do you believe there to have been a second or
18 additional blow off tank on the site?

19 A. I do not know.

20 Q. Was this one part of the refinery operation?

21 A. Repeat.

22 Q. Was there a blow off tank as part of the
23 refinery facilities?

24 A. Not that I know of.

25 Q. Do you believe you would have known of a blow

1 off tank as part of the refinery facilities had there
2 been one?

3 A. Yes.

4 Q. The memorandum continues, "This should be
5 covered, since it is the type of pollution the city has
6 complained of in the past, the practice of dumping oil
7 in this manner should be discontinued." Was the
8 covering of dumped material done for cosmetic reasons?

9 A. I don't know why in this particular statement
10 I used the word "covered". The practice at this time
11 was to take sand or some absorbant material and in the
12 condition such as this, to cover it, allow it to absorb
13 and then clean it up and remove it.

14 Q. To where was it removed?

15 A. I do not know.

16 Q. How do you know that it was removed? By "remov
17 you mean removed from the place where it had occurred?

18 A. Yes.

19 Q. But not necessarily removed from the site?

20 A. I don't know where it would have been removed
21 to. This type of material could have been used for
22 roadways.

23 Q. It refers to the practice of dumping oil in
24 this manner. Would you explain that?

25 A. At the time that I observed it I considered

1 what they were doing to be a practice. It was my
2 recommendation that what they were doing be stopped.

3 Q. Was it a practice that you had been
4 previously aware of?

5 A. I do not know.

6 Q. Was it a practice in the refinery area?

7 A. Would you clarify that question, please?

8 Q. The practice of dumping oil, was that a
9 practice in the refining area?

10 A. No.

11 Q. How do you know that?

12 A. During my period of time we did not dump oil,
13 we had no reason to.

14 Q. This was a practice limited to the wood
15 treating area?

16 A. In this particular instance it was a practice
17 at this particular site.

18 Q. Limited to the wood treating operation of
19 this particular site?

20 A. I would limit it to this specific area. This
21 is the only area I obviously had knowledge of.

22 Q. That would have been Mr. Ward Barton's area
23 of responsibility, that area?

24 A. That is correct.

25 Q. I now refer you to Minnesota Exhibit 116,

1 it's the memorandum of January 15, 1975.

2 (At this time State of Minnesota Deposition
3 Exhibit 116 was marked for identification by
4 the Court Reporter.)

5 BY MR. COYNE:

6 Q. Have you had the opportunity to read this
7 memorandum?

8 A. I have.

9 Q. Is it a memorandum written by you to the file?

10 A. I don't know who it's written to, my copy is
11 not clear.

12 Q. The top line would read what, "memorandum to",
13 and the point is the memorandum is written by you but
14 you don't know who to whom it's addressed, is that
15 right?

16 A. Right.

17 Q. It's a memorandum of a phone call with a Bob
18 Criswell of the Minnesota Pollution Control Agency. Do
19 you recall this conversation?

20 A. I recall talking to someone about this
21 subject, I don't recall who or what his association was.

22 Q. What do you recall of that conversation?

23 A. I received a telephone call, as I say I don't
24 remember from who, inquiring as to what type of
25 materials had been used in the treating process at the

1 Minneapolis plant and I advised the individual that to
2 the best of my knowledge only coal tar and coal tar
3 petroleum had been used in the treatment process at
4 that plant.

5 Q. Do you recall anything else of the
6 conversation?

7 A. He specifically asked if some other types of
8 treating had been used at the plant and I told him I
9 had no knowledge of any.

10 Q. Do you recall anything else of the
11 conversation?

12 A. No, I do not.

13 Q. What is the type of treating to which you
14 make reference in the sixth line of your memorandum?

15 A. I can't remember at this time. Those are, I
16 believe -- I just don't know.

17 Q. In general what do those letters refer to?

18 A. They are materials that are used other than
19 coal tar and coal tar petroleum.

20 Q. Do those refer to chemical compounds?

21 A. Yes, I believe there is -- there is a
22 chemical compound that is used. There are other
23 compounds used that I am not familiar with.

24 Q. I now would like you to refer to a Saint
25 Louis Park exhibit, it's Exhibit Number 12.

1 MR. COYNE: Off the record

2 (At this time a discussion was held off the
3 record.)

4 BY MR. COYNE:

5 Q. Would you please review the document which is
6 a memorandum of April 21, 1970?

7 A. I have reviewed the document.

8 Q. Is this a copy of a memorandum written by you
9 to Mr. Finch?

10 A. It is.

11 Q. Do you recall the April 20, 1970 plant tour
12 by Mr. Lutz?

13 A. I recall a tour in which this particular
14 subject matter was discussed. I do not recall who the
15 man was. I do not recall the time. I do recall the
16 incident.

17 Q. And what do you recall of the incident?

18 A. That during the inspection he made a
19 statement to me that he did not think there was a
20 problem.

21 Q. Is that all that you recall?

22 A. That's all I recall.

23 Q. What was the problem to which he commented?

24 A. The problem in that particular instance would
25 have been contamination of the ground and ground water.

1 Q. What was the context for that comment by him?

2 A. I do not recall. It obviously was the result
3 of his plant tour and observations.

4 Q. Where did he tour that day?

5 A. I do not recall.

6 Q. What did you understand him to mean when he
7 said that you didn't have too much of a problem?

8 A. That the allegations that were being made by
9 the various agencies were unfounded in his opinion.

10 Q. The memorandum continues, "Mr. Lutz told me
11 the state was not too concerned about us at this time."
12 Did he also say that?

13 A. According to my memo he did.

14 Q. Do you recall him saying that, other than
15 looking at the memo today?

16 A. I do not.

17 Q. You have no independent recollection?

18 A. I have no independent recollection.

19 Q. The memorandum continues, "He was there at
20 the request of the City of Saint Louis Park and Mr.
21 McPhee", do you recall that?

22 A. I have no independent recollection of it.

23 Q. Do you recall any other inspections by state
24 personnel other than this inspection by Mr. Lutz?

25 A. None specifically.

1 Q. You say "specifically", do you recall other
2 inspections generally?

3 A. We were constantly being inspected by someone
4 at various times.

5 Q. Yesterday we made reference to a handwritten
6 note and we did not cover this in your examination but
7 rather the examination of Mr. Leshner and I would just
8 like to know if you recognize this document and tell us
9 whose handwriting it is. It's State of Minnesota
10 Deposition Exhibit Number 99.

11 A. Were you asking if I recognized the
12 handwriting?

13 Q. Yes.

14 A. I do not.

15 Q. It's dated in the upper right-hand corner as
16 1970, so apparently it was prepared at the time that
17 you were at the Saint Louis Park facility in Saint
18 Louis Park. Would you recognize Mr. Finch's
19 handwriting if you saw it?

20 A. I do not believe I would at this time.

21 Q. Do you know of any chronology of events
22 prepared over that period of time?

23 A. Such as I am looking at now?

24 Q. Yes.

25 A. I do not.

1 MR. COYNE: Mr. Justin, thank you very
2 much. We have no further questions at this time.

3 (At this time a discussion was held off the
4 record.).

5 MR. SCHWARTZBAUER: Mr. Coyne finished
6 his questioning of Mr. Justin at 11:00 a.m. and I am
7 becoming concerned about the probability that if we
8 start Mr. Hennessy we will not finish him today. I am
9 not satisfied with that procedure for several reasons;
10 Number 1, I think both the witnesses and the lawyers
11 are entitled to take his testimony in a continuous
12 fashion. Moreover, I am concerned about Mr. Hennessy,
13 he is 67 years of age, and I think with respect to him
14 and any other old witnesses that we have in this case
15 we need to be concerned about not starting their
16 deposition and then finding ourselves in a situation
17 where we haven't finished it.

18 I just want to state for the record if Mr.
19 Hennessy's deposition is taken partially and not
20 completed because of his illness or disability, I am
21 simply not going to be put in a position where we use a
22 partial deposition because I think we are entitled to
23 have questioning by all parties including Reilly. So
24 my suggestion is that unless we can finish Mr.
25 Hennessy's deposition that it not be started at all.

1 MR. HIRD: I would like to respond to
2 that on behalf of the United States. We have followed
3 the practice in the course of a week with essentially
4 rolling the depositions. There are a lot of people who
5 will be deposed in the course of this case. There are
6 a number of lawyers who have come out here from
7 Minnesota, Chicago, Washington, D.C.. If we start
8 following the practice of having short days and losing
9 time that is set aside for depositions to continue over
10 and over it's going to stretch the whole procedure out
11 much longer than is necessary.

12 We all saw Mr. Hennessy here yesterday. He
13 seemed in perfect health. I realize he is 67, but the
14 president is 72 and is running the country without
15 significant health problems. I think Mr. Hennessy can
16 go through the ordeal of testifying without much
17 problem. I do think that we have been very lenient in
18 the course of this week in terms of the times of
19 depositions. It has lasted from generally 9:00 to 4:30
20 with certain variations, with an hour and a half breaks,
21 and I don't think that presents a problem. I know Mr.
22 Schwartzbauer's objection and the United States plans
23 to start Hennessy.

24 MR. SCHWARTZBAUER: Well, since the
25 deposition is noticed I can't walk away, but I think

1 it's a procedure that is not very advisable and that's
2 especially true since we have been assured that we will
3 be coming back to Indiana anyway for more depositions.
4 But I am not going to try to stand in the way of the
5 Plaintiffs in this case taking their depositions as
6 they want to take them; but I am concerned about the
7 unfairness that would be presented if the deposition is
8 not finished. That's really all I have to say.

9

10 CROSS EXAMINATION

11 BY MR. HINDERAKER:

12 Q. Mr. Justin, as you know, I represent the City
13 of Saint Louis Park in these proceedings. I am at the
14 outset going to ask some questions about areas that you
15 have been questioned about by Mr. Coyne and there will
16 be bouncing around quite a bit because I don't have any
17 desire to cover what you already talked about.
18 Consequently, if for any reason you are not clear on my
19 question or the import of my question or what the
20 subject matter is, whatever it may be, let me know and
21 I will try to rephrase it and we will try to get on
22 track, if that's all right with you.

23 A. That will be fine, thank you.

24 Q. While you were refinery superintendent at the
25 Saint Louis Park plant I want to ask you some questions

1 about your job role during that period of time of the
2 summer of '69 to the summer of '71. While I know that
3 you said that you were in charge of essentially
4 production of the refinery, raw materials and finished
5 product, could you give me a thumbnail description of
6 how you would spend a typical day or a typical week?

7 A. Well, I guess we will begin with my arrival
8 at the plant in the morning. I would generally review
9 the production that had occurred during the night, I
10 would be reviewing any scheduled shipments that had to
11 go out that particular day, I would be checking on the
12 availability and location of rail cars necessary to
13 make the shipments, I would be obtaining information
14 and recommendations from my supervisor that was in
15 charge of production as well as the maintenance
16 department as to any maintenance that needed to be done.
17 It's hard to describe the normal day-to-day operations
18 as they came up.

19 Q. Let me ask just a few followup questions so I
20 get a further sense of all this. Would you describe
21 your duties as essentially office duties or, to put it
22 another way, did you spend most of your working day in
23 the office?

24 A. I would say that I spent maybe 25 percent of
25 my time indoors. I spent other time out in the plant

1 observing the operations.

2 Q. And the 75 percent out of doors you were in a
3 role of observation of what others were doing as
4 opposed to doing it yourself?

5 A. That is correct.

6 Q. Is this a white color job or did you wear
7 like cloths we are wearing today, suit and tie, or was
8 there occasions when you would be in contact with work
9 places where that would not be appropriate?

10 A. I did not dress as I dress today. It would
11 be considered a white color job, however, I wore cloths
12 in which, if it was necessary for my hands to get dirty,
13 I didn't worry about the cloths.

14 Q. Did you and Mr. Finch office in separate
15 offices?

16 A. Yes, we did.

17 Q. Was there any formal or regular sessions with
18 Mr. Finch where you would report to him?

19 A. No, it was a very informal, open-door type.

20 Q. So that would be on a daily basis that you
21 and he would confer about various matters?

22 A. Possibly.

23 Q. Whatever --

24 A. Whatever came up and whatever needed to be
25 discussed we discussed them at that particular time.

1 Q. When you left the Saint Louis Park facilities
2 in the summer of '71 to come to Indianapolis as
3 director of environmental control, did you have any
4 further involvement with the Saint Louis Park facility?

5 A. Yes, I did.

6 Q. Would you describe that involvement, please?

7 A. It was my responsibility to compile an
8 inventory of equipment that may be of use to the other
9 plants that could be transferred to other plants,
10 advise the other plants of the availability of this
11 equipment and through their request determine what
12 equipment, if any, would be transferred to other plants.

13 Q. Do I correctly assume that that task was the
14 result of the fact that the Saint Louis Park facility
15 was going to be closed?

16 A. Yes.

17 Q. Did you have any additional involvement with
18 the Saint Louis Park facility beyond that?

19 A. I can't recall any.

20 Q. Would it be fair to say that upon your coming
21 to Indianapolis in the summer of '71 you had no
22 involvement in environmental or matters of water
23 contamination relative to the Saint Louis Park facility?

24 A. No. In the capacity of my new job, as long
25 as the plant was still there and still belonged to

1 Reilly Tar & Chemical, any environmental problems that
2 might have arisen I would have been involved in them.

3 Q. So you are telling me because of your job
4 responsibilities or your job duties you would have had
5 that responsibility if the need arose?

6 A. Yes.

7 Q. Do you have any recollection of the need ever
8 arising?

9 A. I have no recollection of any need arising
10 other than what we have discussed previously, the
11 contacts by telephone at a later date.

12 Q. Referring to the memo of January 15, 1975.

13 A. Yes.

14 Q. That was State Deposition Exhibit 116. So
15 with that exception and with the matter of compiling
16 the inventory of equipment can you recall any other
17 involvement that you had in fact relative to the Saint
18 Louis Park facility after coming to Indianapolis?

19 A. I can't recall any at this specific time.

20 (At this time a brief recess was taken.)

21 BY MR. HINDERAKER:

22 Q. I want to ask some questions about your
23 memorandum to Mr. Finch of November 27, 1970, which was
24 previously marked as State of Minnesota Exhibit 111.

25 To get us in context, this is your summary of the

1 seminar in 1970 that's outlined on your resume', right,
2 or identified on your resume'?

3 A. That is correct.

4 Q. When you were discussing your resume' with
5 Mr. Coyne I believe you said that the symposium of
6 1970 dealt with water pollution, and would it be
7 further accurate to say that the symposium of 1970
8 dealt with the pollution of effluent waters.

9 A. Yes.

10 Q. As opposed to pollution ground waters?

11 A. That would be my understanding.

12 Q. On the second page there is the numbered
13 Paragraph 4 and the last sentence says, "The control
14 tests performed would include phenols, dissolved solids,
15 BOD and oil content." And I think I have a sense of
16 the meaning of phenols as well as oil content. Could
17 you tell me your understanding or the meaning for the
18 phrase "dissolved solids" as you have used it in this
19 memo?

20 A. These would be solids that were in suspension
21 rather than solids that would settle out.

22 Q. And were there any particular compounds in
23 mind?

24 A. Not that I can think of.

25 Q. So is this a generic phrase for whatever?

1 A. Yes.

2 Q. And similarly, would you tell me the meaning
3 of BOD 5 as you understood it? Not BOD 5, BOD is what
4 it says.

5 A. Biological oxigen demand, and in this
6 particular case it would be the BOD 5 test I believe
7 you are thinking of. I understand it and I am trying
8 to think of words to put it in.

9 Q. Does it have to do with the extent of oxigen
10 in the water?

11 A. Yes.

12 Q. Going on to Paragraph Number 6, a couple of
13 similar questions. You will see that the paragraph
14 begins by saying, "Of all the methods of secondary
15 treatment offered," it goes on to identify two
16 methods. If we go into the fourth line there is the
17 statements -- the first is the soil percolation method.
18 Do you see where I am referencing?

19 A. Yes, I do.

20 Q. Can you tell me your understanding of the
21 soil percolation method as you were describing it in
22 this memorandum?

23 A. At the symposium Dick presented a paper in
24 which they discussed a system they had in operation in
25 which they would spray irrigate and it was their

1 contention that as the water percolated through the
2 ground it would be purified through biological action.

3 Q. What was the source of the water that could
4 be sprayed upon the ground?

5 A. In this particular case it would have been
6 from a treating plant operation.

7 Q. So did the paper present the proposition that
8 one could take the waste effluent or the wastewater of
9 the treating plant facility and spray it upon the ground
10 as one method of disposal?

11 A. Yes.

12 Q. Was that a practice that was recommended by
13 the author for consideration?

14 A. Yes.

15 Q. And then the second method, going down a
16 couple more lines, trickling filter process?

17 A. Yes.

18 Q. Could you describe that for me as well?

19 A. This is a process in which you flow the water
20 over a packed column or stack of rocks or any surface
21 that would allow biological growth to take place and in
22 the process biooxidation would occur. The surface
23 would become an area on which the growth would occur.

24 Q. Let me ask another question back on that soil
25 percolation method. I believe you said the author

1 recommended it for recomendation by treating plants.
2 Did you understand that the author recommended that
3 procedure as one that could be considered by the Reilly
4 Tar facility in Saint Louis Park?

5 A. The application could be considered on the
6 basis that the type of water being treating would be
7 very similar.

8 Q. The type of water being treated at the Saint
9 Louis Park facility would be similar to the type of
10 water the author or the speaker at the seminar had in
11 mind?

12 A. Yes.

13 Q. And just before we go to lunch, let me ask
14 just a couple more questions about this document. I
15 guess I am looking at the last paragraph on the last
16 page. "In general, all those present felt that
17 abatement of pollution from treating plants was
18 inevitable." The question is whether your use of the
19 word "inevidtable" suggests an understanding at your
20 time as clearly as you could foresee governmental
21 regulation was on the forefront?

22 A. Yes.

23 MR. HINDERAKER: Well, it is the hour of
24 lunch.

25 (At this time a recess was held.)

1

2 BY MR. HINDERAKER:

3

4 Q. I have, I think, one question about the
5 trench system when you were at Saint Louis Park and the
6 question is what were they made of?

7

8 A. I know the top was covered with wood but I do
9 not recall if the bottoms and sides were concrete or of
10 wood construction.

11

12 Q. Those would be the likely alternatives?

13

14 A. Yes.

15

16 Q. You described the appearance of the well,
17 which we have been calling the Republic deep well, with
18 the pump on top of the concrete pier and I believe you
19 said, and correct me if I am wrong, but I believe you
20 said that even if there were a spill of materials those
21 materials would not likely enter the well?

22

23 A. That's correct. I see no way that the
24 materials could get into the well.

25

26 Q. Is it similarly true that if there were an
27 occasion when the property was in a flood condition
28 because of storm water that the storm water would also
29 not get into that particular well?

30

31 A. I don't believe it would ever possibly get
32 into that well. I never saw a level of water even
33 closely approach the top of that pier and I can't

1 comprehend a level of water ever reaching that height.

2 Q. On top of the pier wasn't there a pipe coming
3 out from that?

4 A. The only thing I recall on top of the pier
5 was the pump sitting on what would have been the pipe
6 which would be the top of the well casing.

7 Q. And the piping itself into the well was
8 inside of the concrete pier?

9 A. That's the way I recall it.

10 Q. So the pump sat directly on the concrete pier
11 and the piping into the well would be interior to the
12 concrete?

13 A. That is my recollection.

14 Q. You were asked some questions regarding steam
15 coils which heated the tanks, and then you were asked
16 about the disposition of the condensate from the steam
17 and I believe you said at one point it would have been
18 disposed of on the ground and then you mentioned that
19 after you came to Saint Louis Park you had started to --
20 after you came to Saint Louis Park you have done
21 something with regard to collecting that condensate to
22 discharge it to a single point. Do you recall that
23 topic being discussed?

24 A. Yes, I do.

25 Q. My question is whether this different

1 collection system relative to the condensate was
2 something that you had proposed but was not
3 implemented or was it implemented as well?

4 A. It was something that I implemented.

5 Q. And the point where that condensate
6 discharged, do you recall where that was?

7 A. The collection system that I recall
8 discharged into the trench between the tanker
9 unloader or unloading shed and the tar cistern in a
10 westerly direction and then changed directions and ran
11 in a northwest direction where it ultimately was picked
12 up by sump.

13 Q. And then ultimately into the settling basin?

14 A. Yes.

15 Q. And the trench you reference would have been
16 one of the trenches that remained after the pipes were
17 brought above ground?

18 A. Yes.

19 Q. All right. New topic. Monroe Brown, is he
20 alive to your knowledge?

21 A. I have heard that he is deceased.

22 Q. What have you heard with regard to his state
23 of residence prior to his death?

24 A. It was my understanding that he was still
25 living in the Minneapolis area. I am not certain but

1 it seems at one time someone told me he had sold the
2 home he was living in when I was there. I am not sure
3 if that's correct or not.

4 Q. You were also asked some questions about --
5 this is another new topic. You were asked some
6 questions about a lawsuit that was commenced in
7 approximately October of 1970, commenced by the State
8 of Minnesota and the City of Saint Louis Park against
9 Reilly Tar and I believe you said you had yesterday or
10 the day before no recollection regarding the subject
11 matter of that litigation, is that correct?

12 A. That is correct.

13 Q. Relative to that litigation in particular, as
14 plant superintendent for the refinery division, did you
15 have any involvement in the management of that suit?

16 A. No, I would not.

17 Q. I assume that was a matter that Mr. Finch
18 would have been responsible for?

19 A. I am not sure who would have been responsible
20 for it or at what level it was being handled.

21 Q. And let's just talk about the local level at
22 Saint Louis Park. If any employee at the Saint Louis
23 Park facility was to be involved in that litigation,
24 that is, the management of that litigation, would that
25 person have been Mr. Finch?

1 A. I would say that would be correct.

2 Q. Do you recall whether you and Mr. Finch would
3 have even discussed the suit at the time?

4 A. It's possible it could have been a subject of
5 conversation.

6 Q. Would the conversations on that topic have
7 been in the nature of a casual nature as opposed to
8 related to your business responsibilities?

9 A. It would probably have been on an informative
10 nature to make me aware that the suit existed.

11 Q. And after you were advised that the suit did
12 exist do you think you were kept apprised of any
13 further progress of that suit?

14 A. Well, first of all, I am not sure I was
15 advised.

16 Q. Okay.

17 A. The possibility exists that I would have been
18 told about the existence of the suit.

19 Q. And given your duties as refinery
20 superintendent, am I correctly assuming that the
21 litigation would not have been a matter that you would
22 have been involved with given your responsibilities at
23 the plant?

24 A. That is correct.

25 Q. Is the same true with regard to negotiations

1 between Reilly Tar and the City of Saint Louis Park for
2 the purchase and sale of the property; that is, your
3 job duties did not entail that activity?

4 A. That is correct.

5 Q. Do you recall being a participant in even the
6 slightest way in the negotiations for the sale of the
7 Saint Louis Park facility?

8 A. I do not recall having any involvement
9 whatsoever in the transaction.

10 Q. And you left by the summer of '71, did you
11 not?

12 A. I left in the summer of '71.

13 Q. And then do I correctly conclude from the
14 testimony just before lunch that after you came to
15 Indianapolis you had no involvement in any of the
16 negotiations for sale between Reilly Tar and the City
17 of Saint Louis Park?

18 A. That is correct.

19 Q. Mr. Justin, I am going to show you again what
20 was previously marked is State Exhibit 102. I know
21 that you did not write it except for your signature on
22 the second page of the document, but you were asked
23 some questions regarding the words in the upper
24 left-hand corner of the second page, if you would turn
25 to that, please?

1 A. May I review this again?

2 Q. Absolutely. Any questions will be limited to
3 the upper left-hand corner of the second page.

4 A. I have reviewed the document again.

5 Q. Do you see in the upper left hand corner of
6 the second page where it says "phenol under .001"?

7 A. Yes.

8 Q. Do you know, can the designation .001 be
9 translated into parts per million, if you know?

10 A. I would interpret that as being in parts per
11 million.

12 Q. How would you express it in parts per million
13 terms?

14 A. .001 milligrams per liter or parts per
15 million.

16 Q. Do you have a recollection of the source of .00

17 A. I do not.

18 Q. If I would tell you that .001 miligrams per
19 liter was a recommended limit for phenols from the
20 World Health Organization would you be surprised by
21 that?

22 A. No.

23 Q. That's a possibility as well as any other
24 thing that the .001 might relate to?

25 A. I would accept it as a fact that someone had

1 determined that's what it should be.

2 Q. While you were at the site at the Saint Louis
3 Park facility, do you recall now any direct
4 participation in meeting with the city of Saint Louis
5 Park personnel relative to the operation of the Reilly
6 plant?

7 A. I know I was involved in meetings but I don't
8 recall any specific meetings.

9 Q. With regard to limitations of contamination
10 levels, do you recall the city being concerned about
11 any particular compounds?

12 A. Yes, I do.

13 Q. And was one of those phenols?

14 A. Yes.

15 Q. Was another oil?

16 A. Oil and what?

17 Q. I don't know.

18 A. Surface water or underground water or on the
19 ground or what?

20 Q. Let me ask you what the city concerns were as
21 you heard them?

22 A. The only thing I can recall was a concern
23 with phenol in the water of some of the wells in Saint
24 Louis Park.

25 Q. With regard to well water then, the city's

1 concern was directed solely at phenols?

2 A. That's the only thing I recall.

3 Q. New topic. You made the distinction between
4 in ground and underground and it was in the context of
5 the cistern and it was your view, was it not, that the
6 cistern was in ground as opposed to underground as you
7 use those terms?

8 A. That is correct.

9 Q. Would you say the same thing for the tanks,
10 that is, any tanks that the Saint Louis Park facility
11 had, in-ground tanks as opposed to underground tanks?

12 MS. COMSTOCK: Are you talking about
13 Reilly's tanks?

14 MR. HINDERAKER: Yes.

15 A. When I was there there was only one tank
16 below ground that I recall. I would consider that
17 underground.

18 Q. And what are the relevant distinctions?

19 A. The tank itself was completely covered by
20 earth with the exception of the head which extended
21 above the grade level.

22 Q. How about the trenches, would they be in your
23 phraseology in-ground or underground?

24 A. They would be in-ground.

25 Q. Mr. Justin, let me show you what you

1 previously saw, State Exhibit 105. Take a moment to
2 refresh yourself about the subject matter of that
3 document. The question is whether the subject matter
4 of that document is pan control system?

5 A. Yes.

6 Q. Was the purpose of that, to reduce odor
7 emissions in the air?

8 A. The purpose of it was to reduce air emissions.

9 Q. That's all I have, I just wanted to be clear
10 about that.

11 I want to now turn to state Exhibit 32 B, one
12 of the last things you were looking at before Mr. Coyne
13 finished and I have to find a copy of that. You have
14 one there. Let's look at that for a moment and take
15 what time you want to refresh yourself, I am going to
16 focus my questions on the last paragraph.

17 A. I have reread the document.

18 Q. Do you have a recollection of a cistern being
19 in the treating area?

20 A. I do not.

21 Q. And if I heard you correctly with Mr. Coyne,
22 I believe you said that given the words you used in the
23 memo, that is an area southwest of the cistern in the
24 lumber yard, you from that language concluded that maybe
25 there was a cistern in the lumber yard, is that right?

1 A. Yes.

2 Q. Let me suggestion another alternative
3 interpretation of your words. Tell me if it's right or
4 wrong. If you started off with a tar cistern and went
5 southwest of that into the lumber yard would you then
6 be in an area where you observe this dumping from the
7 blow off tank?

8 A. If I went southwest from the tar cistern?

9 Q. Yes.

10 A. That was an open area, there was nothing out
11 there.

12 Q. Okay. I was only suggesting that perhaps the
13 document says that you notice an area that was
14 southwest of the cistern, this area happened to be in
15 the lumber yard where creosote oil was being removed
16 from a blow off tank, meaning that the tar cistern was
17 the point of reference from which you went southwest.
18 If my interpretation is not the most likely tell me so?

19 A. Well, according to my description here, if my
20 description is correct and I use the right words in
21 this description, that if you consider the cistern to
22 be the tar cistern and you went southwest from that
23 location there would be no blow off tank in that area.

24 Q. Who is or was D. L. Lindberg?

25 A. That was Deny Lindberg. I don't recall what

1 his position was.

2 Q. He was at the Saint Louis Park facility of
3 Reilly Tar while you were there?

4 A. Yes.

5 Q. Do you know his present whereabouts?

6 A. I do not.

7 Q. Would you describe for me what you saw when
8 men were dumping creosote oil that had been removed
9 from the blow off tank?

10 A. I don't recall what I saw.

11 Q. How would these men be dumping the creosote
12 oil?

13 A. Again I do not know.

14 Q. All right. Whether by buckets or through a
15 hose or how could it be done?

16 A. I don't know and it may have even been a very
17 small amount that was discoloring the ground rather
18 than a large volume that was ponding.

19 Q. You don't have a recollection of that at all
20 I take it?

21 A. No.

22 Q. I am just trying to understand what
23 facilities were at Saint Louis Park and how jobs could
24 be done, you know, given the material, creosote oil.
25 What are the ways in which men could dump creosote oil

1 that have been removed from the blow off tank?

2 A. I don't know.

3 Q. Do you recall if Mr. Lindberg worked in the
4 refining area or in the treating area?

5 A. I do not recall.

6 Q. Do you recall if he had a supervisory
7 position or was he a workman?

8 A. He was not in the union bargaining group.

9 Q. So if there are two choices of jobs, he was
10 management?

11 A. That is correct.

12 Q. When you were at the site did storm waters go
13 across the property?

14 A. Yes.

15 Q. Was anything ever done while you were there
16 to prevent that from happening?

17 A. No.

18 Q. Did you ever have any discussions with anyone
19 about possible prevention methods?

20 A. Yes.

21 Q. And would you relate those discussions to me,
22 please?

23 A. I tried to get Mr. Finch to let me plug the
24 big pipe that was emptying into our pond from the city
25 storm runoff.

1 Q. And the pond you are referring to is the
2 cooling pond?

3 A. Yes.

4 Q. And Mr. Finch's reply to that?

5 A. He wouldn't allow me to do it.

6 Q. Were there any other methods of reducing the
7 flow of water across the property that you recall
8 discussing?

9 A. I can't think of any.

10 Q. I take it there was not a trench system
11 around the perimeter of the property to channel the
12 water around the property as opposed to over it?

13 A. No, there was not.

14 Q. I think you were asked some questions about
15 the disposal of waste product on the site itself and I
16 know you don't have any recollection of that happening
17 and I just wanted to -- I am not certain that the
18 questions may have been asked in the context of
19 disposing of that type of material on the northern
20 portion of the site. My question to you is whether you
21 have any recollection of waste coal tar type material
22 being disposed of any place on the site?

23 A. What do you mean by "disposed of"?

24 Q. Either poured onto the ground or dug into the
25 ground?

1 A. I know of one instance where some material
2 was placed in the ground that I can think of.

3 Q. Could you describe that instance for me,
4 please?

5 A. Prior to my arriving there was some, either a
6 tank or some tanks, being tar tanks, I do not know
7 whether it was one or more, that were cleaned and I was
8 told that the material was placed in the area southwest
9 of the refinery where the ground tanks were removed.

10 Q. And then that material was then covered over?

11 A. Yes.

12 Q. Did you get a sense of the quantity of
13 material that would have been involved?

14 A. No, I did not.

15 Q. Is that the only story that you had heard of
16 disposing of that type of material on the property?

17 A. Yes.

18 Q. Did you get a sense of how much prior to your
19 arrival at Saint Louis Park that had occurred?

20 A. It was within one or two years I believe.

21 Q. And that would be because that was about the
22 period of time when things were going from underground
23 and in-ground to above ground?

24 A. Yes.

25 Q. When you heard that did that raise in your

1 mind any concern eventually?

2 A. Eventually, no.

3 Q. And why not?

4 A. I had no information or knowledge to indicate
5 that the material contained anything that would be
6 harmful to the health of an individual.

7 Q. Did that understanding of yours continue
8 throughout the time you were at the plant?

9 A. Yes.

10 Q. Did it continue after you came here to
11 Indianapolis?

12 A. That's a difficult question to answer.

13 Q. Well --

14 A. I have read a lot of studies that have been
15 done on coal tar and on chemicals that are found in
16 coal tar. Some of these studies state that some of
17 these chemicals are carcinogens, others are suspected
18 carcinogens. Other studies have shown that some of
19 these chemicals inhibit carcinogenic growth. As a
20 result of this I am not thoroughly convinced that the
21 chemicals contained in coal tar in the trace amounts in
22 which they are contained are harmful to human health in
23 the normal course that we come in contact with them.

24 Q. And what are the normal courses in which we
25 come in contact with them?

1 A. In working in the plant your every day
2 contact, skin contact is sometimes encountered, any
3 reported leaching such as we are discussing here that
4 might get into the ground water, the levels at which
5 they are found in the ground water. I am not convinced
6 are harmful.

7 Q. Did this literature come to your attention
8 before or after 1974?

9 A. It would have been after 1974.

10 Q. Would it be correct to state that your
11 understaanding of health consequences, whether there
12 are some or whether there are none, the understanding
13 that you had while you were at the plant, is that there
14 were no adverse health consequences, that was an
15 understanding that you would have held while you were
16 at the plant and until at least 1974?

17 A. That is correct.

18 Q. I am going to show you St. Louis Park Exhibit
19 43. Here is a copy for you. Why don't you take a
20 moment to read that? Have you had a chance to at least
21 thumb through most of the documents?

22 A. Yes.

23 Q. Do you recall seeing any part of that exhibit,
24 Saint Louis Park Exhibit 43, while you were at the
25 Saint Louis Park facilities of Reilly Tar?

1 A. I do not recall seeing it during the time I
2 was at the plant.

3 Q. You notice the first page of the document,
4 fourth paragraph, identifies yourself as one of the
5 people present at a meeting with the city manager?

6 A. That is correct.

7 Q. From reviewing the document does that assist
8 your recollection about this particular section I am
9 reading. Let me put it another way. Do you recall
10 anything about that meeting that isn't written on a
11 piece of paper?

12 A. I do not.

13 Q. Would you turn to the second page, please?

14 A. All right.

15 Q. Going down to the sixth paragraph, second
16 from the bottom, in the last phrasing, the last two
17 lines. "The meeting had been handled in rather a
18 curious fashion and other issues might well be
19 involved." Can you enlighten me in any way in what
20 that may have meant?

21 A. I don't know why Mr. Wheeler would have made
22 that statement.

23 Q. I am not asking you to place yourself in Mr.
24 Wheeler's shoes or recount what was in his mind, but
25 from your participation at the meeting, one of the

1 people present, do you have any recollection of that
2 meeting which would give sense to the phrase I read?

3 A. I do not.

4 Q. I would now like to show you what we had
5 marked previously as Saint Louis Park Deposition
6 Exhibit 44. Would you take a moment to read that,
7 please?

8 A. I have read the document.

9 Q. And it's dated April 21, 1970, memorandum
10 from yourself to Mr. Finch?

11 A. That is correct

12 Q. Is that your signature on the bottom of the
13 memorandum?

14 A. That is my signature.

15 Q. So this is something you would have prepared
16 and submitted to Mr. Finch in the normal course of
17 business while you were at the Saint Louis Park
18 facility?

19 A. That is correct.

20 Q. Going about a fourth of the way down, there
21 is some language that begins, "Mr. Koonce brought out
22 same points of concern that Mr. Lutz had; namely, a
23 report from Saint Louis Park about dripping creosote
24 oil all over the place and underground storage leaking
25 and polluting the ground water." Have you found that

1 phrase?

2 A. Yes, sir, I have.

3 Q. And the next sentence is, "I again told him,
4 as I had Mr. Lutz, that this was simply not true." Do
5 you see that?

6 A. I do.

7 Q. My question is what was simply not true?

8 A. That we were not dripping creosote oil all
9 over the place, we did not have underground storage
10 much less underground storage that was leaking.

11 Q. Did you agree with the statement of Mr.
12 Koonce as he related that Reilly was polluting the
13 ground water?

14 A. I don't know if I would have had an opinion
15 one way or the other.

16 Q. So as I hear your best recollection of time
17 frame of '69 to '71 relative to this issue of whether
18 Reilly Tar was polluting ground water is that you don't
19 recall what your view might have been on that?

20 A. I do not.

21 Q. Tell me which is right, you don't recall what
22 your view may have been on that, or you don't know that
23 you would have a had a view one way or the other?

24 A. I don't recall what my view would have been
25 on that.

1 Q. But you would have had a view in all
2 likelihood?

3 A. In all likelihood I would have had an opinion.

4 Q. Going down the page a few more sentences it
5 goes on to say, "I did find out from him that the State
6 had run tests on some of Saint Louis Park's wells,
7 which ones he did not know, and found the phenol
8 contents to be five parts per million, which he said
9 was well below concentrations." Do you see that
10 sentence?

11 A. Yes, I could.

12 Q. With regard to that, can you give me any more
13 enlightenment many on the conversation you had with Mr.
14 Koonce relative to that?

15 A. No, I can recall nothing beyond what I read
16 in the document.

17 Q. Do you have any recollection of what level
18 would be required before there would be a concern?

19 A. At this point in time?

20 Q. Well, yes. What is your best recollection
21 today?

22 A. Well, I mean, at the point in time April 1970?

23 Q. Yes, that's what I mean to --

24 A. No, I don't know what levels would have
25 created a concern.

1 Q. Do you recall when you gave any of the City
2 officials at Saint Louis Park any advice relative to
3 whether their drinking water supply could be polluted
4 from the operations of the Reilly plant?

5 MS. COMSTOCK: That's kind of vague, Al,
6 if you could be more specific about "advice".

7 BY MR. HINDERAKER:

8 Q. Any comment to the city, any statements to
9 the city?

10 A. I am still not quite clear on your question.

11 Q. Okay. I take it that as you have said you do
12 recall the fact of meetings with the city, although not
13 on those particular deals, et cetera, you do recall the
14 fact that there were meetings or maybe only one meeting
15 with city officials and that in addition they had
16 raised their concern regarding the possibility of
17 phenol contamination of their well water, that's
18 accurate so far, is it not?

19 A. (Indicated in the affirmative.)

20 Q. Yes?

21 A. Yes.

22 Q. My question is what did you say in reply to
23 the city's concern?

24 A. I don't know what I said or if I said
25 anything.

1 Q. And to be clear I am not asking for a
2 verbatim recital of the words but do you recall
3 responding in any way, even in general?

4 A. I do not.

5 Q. Let me show a document you saw a little while
6 ago, Saint Louis Park Deposition Exhibit 12. Would you
7 take a moment to refresh yourself on that? Have you
8 had a chance to review that again?

9 A. I have had a chance to review it again.

10 Q. As I heard your discussion with Mr. Coyne
11 this morning, the problem which you relate from your
12 conversation with Mr. Lutz was a problem relative to
13 contamination of the ground and ground water, is that
14 accurate?

15 A. Yes.

16 Q. And am I also accurately recounting your
17 earlier testimony that it was the opinion of Mr. Lutz
18 that such allegations were unfounded in his opinion?

19 A. That was the impression I had.

20 Q. Do you recall whether you concurred with Mr.
21 Lutz?

22 A. Yes, I would say I did.

23 (At this time Saint Louis Park Deposition
24 Exhibit 46 was marked for identification by
25 the Court Reporter.)

1 BY MR. HINDERAKER:

2 Q. Have you had a chance to review what we have
3 just had marked as Saint Louis Park Exhibit 46?

4 A. I have.

5 Q. Is this a shorthand memorandum written to
6 yourself?

7 A. It was.

8 Q. To Mr. Finch?

9 A. That is correct.

10 Q. Not too many questions. The first one is
11 with reference to the sampling of well water and the
12 question is do you know what well was sampled?

13 A. The Republic deep well would have been the
14 well sampled.

15 Q. And your memo mentions the purpose to
16 determine phenol content. Do you have any recollection
17 of what the result of that test was?

18 A. I do not.

19 Q. So much for that piece of paper.

20 Q. Let's look at State Exhibit 110. Have you
21 looked at the document?

22 A. Yes, I have.

23 Q. This document recounts some phenol analysis
24 that you had done or did yourself at locations outside
25 of the plant, right?

1 A. Yes.

2 Q. And I think you said the purpose was to make
3 a determination of background levels of phenols?

4 A. Yes.

5 Q. What conclusions were reached from your
6 analysis?

7 A. I don't recall what we concluded at the time.

8 Q. Do you draw any conclusions from the data
9 that you record in the memo?

10 A. I have got another copy here that's clearer?

11 A. I think I would probably conclude from this
12 that some of the background levels we found in lakes
13 that would be considered, quote unquote, "pristine
14 lakes" or lakes that were not susceptible to any
15 questionable source of contamination outside the area
16 in which they were contained, that those natural
17 background levels were at levels which some people
18 might consider hazardous to your health and that if
19 water from these lakes is also seeping underground,
20 getting into ground water, it could be contributing to
21 the concentrations appearing in the ground water.

22 Q. That's a conclusion that you reached today on
23 the basis of that data?

24 A. Yes.

25 Q. The only reason I am asking you that is that

1 in giving me your answer you are using the knowledge,
2 training, you are using your experience up to today for
3 that answer as east opposed to trying to place yourself
4 back in time in 1970?

5 A. That would be correct, however, I do recall
6 that we were thinking along the same lines back in
7 those dates that there was a natural background of
8 phenols in lakes, that could be contributing to the
9 background levels or the levels that were being picked
10 up in the underground water.

11 Q. And the foundation for this opinion is in the
12 numbers themselves in the document?

13 A. Yes, it would be.

14 (At this time Saint Louis Park Deposition
15 Exhibit 47 was marked for identification by
16 the Court Reporter.)

17 BY MR. HINDERAKER:

18 Q. Would you take a moment, Mr. Justin, to read
19 what I have had marked as Saint Louis Park Deposition
20 Exhibit 47?

21 A. I have read the document.

22 Q. This was prepared by yourself?

23 A. It was.

24 Q. Mr. Leshar, I see it is bearing the date of
25 April 15, 1971. The first question is what is the

1 oxidation of phenols?

2 A. It would be the breaking of the phenolic ring,
3 that's about the best description I can think of at
4 this time.

5 Q. This process of oxidation of phenols was
6 experimented on what, if you recall?

7 A. It was on some samples of water but I don't
8 remember where I obtained them. It may have been
9 samples that I made up from paraphenol crystals. I
10 don't recall where the sample came from.

11 Q. The experiment was for what purpose?

12 A. To determine if phenols could be oxidized or
13 destroyed with the use of ultra violet.

14 Q. And if the determination was affirmative, for
15 what use at the Reilly facilities in Saint Louis Park
16 would the process contemplate?

17 A. I don't think there was any contemplation of
18 the use, it something that I did on my own as an
19 experiment out of curiosity to see if it would work I.

20 Q. Do you recall the results?

21 A. Yes, I recall in my mind there was some
22 positive results.

23 Q. You mean there was some oxidation of the
24 phenols?

25 A. Yes.

1 Q. Do you recall if the extent of oxidation was
2 sufficient to call the experiment successful?

3 A. In my mind it was.

4 Q. But then, as you say, no further work was
5 done beyond this test to try to make this method one of
6 application?

7 A. That is correct. There is more to it than
8 this. I was also trying to prove an accelerated manner
9 that sun light aided in the oxidation or the reduction
10 of phenols.

11 Q. And why were you trying to do that?

12 A. I don't recall what my reason was at that
13 time. I know subsequently I have done some work with
14 aeration to see if, you know, aeration would reduce
15 phenols without sun light and had been unsuccessful so
16 my work here was to find out if sun light was necessary
17 in the process. By using ultra Violet light I merely
18 hoped to accelerate the effect of sunlight.

19 Q. So whatever may come of that whole learning
20 process you are going through at least, by the time the
21 Saint Louis Park facility was closed, nothing was done
22 by that knowledge that you gained by that experiment?

23 A. That is correct.

24 Q. I am going to show you the next document that
25 was marked as State Exhibit 83. Mr. Justin, I have

1 shown you what was previously marked as State Exhibit
2 83 and I would like you to turn to the third page. Now,
3 you go on the left-hand column of that page going down
4 about mid way there is the designation K001, do you see
5 that?

6 A. Yes, I do.

7 Q. Following that designation there are a
8 variety of chemical compounds listed, do you see those?

9 A. I do.

10 Q. My question is whether you knew prior to 1974
11 that any of those compounds would be found in the waste
12 effluent of the Saint Louis Park facilities?

13 A. Yes.

14 Q. Which ones?

15 A. Phenol.

16 Q. Any others.

17 MS. COMSTOCK: The question is his
18 knowledge prior to '71, is that right?

19 MR. HINDERAKER: '74?

20 A. Creosote.

21 Q. Any others?

22 A. No.

23 Q. Let's go to the middle of the same page you
24 will see a little bit beyond the halfway point the
25 designation K035, do you see that?

1 A. Yes.

2 Q. Again, there are chemical compounds listed
3 after that designation, do you see those?

4 A. Yes.

5 Q. I have the same question.

6 A. The only one listed there would be creosote.

7 Q. No others?

8 A. No.

9 Q. When you were at the Saint Louis Park
10 facility did you observe any of the soils in a highly
11 saturated condition, saturated with product?

12 A. I would have.

13 Q. Where would that have been located?

14 A. When we are speaking of soils how deep are
15 you speaking of?

16 Q. Well, after you answer this part of the
17 question my next question will be the extent of
18 penetration.

19 A. If you want to combine --

20 Q. Okay.

21 A. I can't think of any specific locations but
22 from time to time obviously we had a leak or an
23 accidental spill onto the ground. These would be the
24 areas I would see. The area around the tar cistern,
25 there was an area on the southwest side of the refinery

1 that I recall, which there was an accidental spill.
2 There was an area to the northwest of the refinery
3 building which I recall seeing an accidental spill.

4 Q. Is that all?

5 A. That's all I can think of at this time.

6 Q. And the next question is the extent of
7 penetration into the soil?

8 A. Okay. The extent of penetration on the one
9 northwest of the refinery would have been less than an
10 inch. The ones southwest of the refinery would also
11 have been less than an inch. There would be one -- the
12 area at the tar cistern on the eastern side of it is
13 the one that I am thinking of where the trucks back up
14 and unloaded, may have been as much as a foot. The
15 reason I say that, we had a mound of dirt there that
16 was mounted up to stop the trucks as they backed up to
17 act as a wheel chalk so they couldn't back into the
18 cistern and that would get saturated from the dripage
19 out of the tar trucks in connecting and disconnecting
20 and from time to time that was removed and replaced
21 with new soil.

22 Q. Now, without regard to spills or leaks that
23 you have personal knowledge of, did you see indications
24 of other locations on the site where there was
25 significant penetration of product into the soils?

1 A. Can you define "significant".

2 Q. Let's define it as beyond a few inches.

3 A. Yes.

4 Q. And those would be in what area?

5 A. The area along the ditch next to Walker
6 Street, the soil there I observed had penetrations in
7 excess of several inches.

8 Q. Can you give me the extent to which it
9 exceeds that?

10 A. I could not.

11 Q. Any other places?

12 A. I can't think of any at this time.

13 Q. Going back to concern that the city raised
14 about phenols in the well water, did you have any
15 understanding of what the consequences would be should
16 there be phenols in the well water?

17 A. Other than the fact that they made the
18 statement that they had to quit using the wells.

19 Q. And do you recall why they would quit using
20 the wells?

21 A. Their concern was that the phenol contents
22 would be harmful to the drinking water.

23 Q. You mean taste and odor?

24 A. Taste, odor and health.

25 Q. And how about from the prospective of

1 yourself, did you concur in that or did you have a
2 different view?

3 A. I had a different view.

4 Q. And that view was what?

5 A. I didn't consider it harmful.

6 Q. To health?

7 A. To health.

8 Q. Did you consider it harmful to the drinking
9 water?

10 A. No.

11 Q. And why not?

12 A. When I was in Granite City the Shell refinery
13 in Wood River, which is north of Granite City, on
14 several occasions it was allocated that they dump
15 volumes of phenol into the Mississippi River and on two
16 or three occasions the phenols, of course, went
17 downstream. Our source of city water in Granite City
18 was from the East Saint Louis water treatment system?

19 A. As a result it got into the system, the odors
20 were -- the best I can describe, it smelled like iodine.
21 The whole town smelled like Iodine and the water was
22 distastefull, you could not drink it, not that it would
23 nauseate you but I think it was more the smell than the
24 taste and for a couple of days it was, for all
25 practical purposes, unusable. At that time the

1 officials, federal as well as state, went on record as
2 saying that it was not harmful to our health. If that
3 condition was not harmful to our health I felt that
4 this condition certainly was not harmful to anyone's
5 health.

6 Q. You had that experience at Granite City that
7 would have been prior to your coming to Saint Louis
8 Park?

9 A. That is correct.

10 Q. And you mentioned that the odor was in the
11 water for a couple of days, it would have thereafter
12 passed and it wasn't in the drinking water supply?

13 A. It was necessary for them to flush the entire
14 system by opening fire hydrants and mains and this sort
15 of thing until the system was flushed and they had good
16 water again.

17 Q. After that then they had good water again?

18 A. Yes.

19 Q. Did you have any views about biodegradation
20 and phenols?

21 A. Not while I was at Saint Louis Park, unless
22 it would have been towards the end of my tenure there.

23 Q. Did you form a view about that at some point?

24 A. Yes, I did.

25 Q. And would that have been before or after 1974?

1 A. It would have been before 1974.

2 Q. What was your view?

3 A. I was made aware of a biooxidation system
4 that was in operation at our Chattanooga plant and the
5 effective results of this system.

6 Q. And were the results effective?

7 A. Yes.

8 Q. Do you recall to what degree?

9 A. Yes, we were able to reduce the phenolic
10 content of that water to at least one part per million.
11 As a result of that I installed a biooxidation pond in
12 one of our other plants based on that system and we
13 were able to reduce the effluent of that pond to a
14 tenth of a part per million or lower.

15 Q. That experience, does it bare upon whether
16 phenols would biodegrade if the those phenols were in
17 the soils as opposed to water?

18 A. No, it does not, because the system I am
19 speaking of uses a large volume of oxygen and earation
20 in the process.

21 Q. Prior to 1974 did you come to any views
22 regarding biodegradation of phenols in soils?

23 A. Yes, I did.

24 Q. What were they, please?

25 A. Based on some information that I had received,

1 and I don't recall where, there were indications that
2 it would occur in the soil as well.

3 Q. It would occur in the soil as well meaning
4 that phenols would biodegrade in the soil as well?

5 A. Yes.

6 Q. Do you recall the extent?

7 A. I do not.

8 Q. Do you recall if it was as extensive as the
9 biodegradation of phenols in the water?

10 A. No, I do not.

11 Q. It could be more or it could be less, as far
12 as your recollection is concerned? You don't recall
13 one way or the other?

14 A. I don't recall one way or the other.

15 (At this time Saint Louis Park Deposition
16 Exhibit 48 was marked for identification by
17 the Court Reporter.)

18 BY MR. HINDERAKER:

19 Q. Mr. Justin, I would like to show you what we
20 have marked as Saint Louis Park Deposition Exhibit 48
21 it appears to be prepared by yourself, it's dated
22 7-2-70. Have you had a chance to look at that?

23 A. I have.

24 Q. Did you prepare that?

25 A. I did.

1 Q. You prepared that in the normal course of
2 your duties as refinery plant superintendent at the
3 Saint Louis Park facilities?

4 A. Yes.

5 Q. Why was it of prime importance to get the
6 phenol content in balance?

7 A. The question was constantly arising as to
8 what the phenol content was of water or wastewater at
9 various places. The cost of the analysis was starting
10 to become a concern and by doing this I saw a way that
11 we could save money and at the same time obtain quicker
12 results and more results.

13 Q. And I take it you were testing your plant's
14 discharged wastewater and effluent as opposed to ground
15 waters?

16 A. Yes.

17 Q. Did you ever test ground water for phenols?

18 A. I don't recall.

19 MR. HINDERAKER: I thank you.

20

21 CROSS-EXAMINATION

22 BY MR. LEININGER:

23 Q. Mr. Justin, I am going to ask some questions
24 on behalf of the United States and I would like to
25 repeat basically what Al said. I am going to be

1 jumping around a little bit sort of picking up various
2 areas that were covered earlier, so if I bring
3 something in out of context or start talking about
4 something that you don't know what I am talking about,
5 ask me to restate it or give you a little more detail
6 as to where I am coming from. I will be happy to do
7 that.

8 A. Very well.

9 Q. One thing I would like to pick up on that you
10 were discussing a few minutes ago, you said something
11 about the phenols in wells and their being shut down.
12 I didn't quite pick up as to whose wells and who was
13 doing the shutting down.

14 A. They were Saint Louis Park wells.

15 Q. When you mentioned the spills northwest and
16 southwest of the refinery, I assume that was between '69
17 and '71 while you were there?

18 A. Yes.

19 Q. What material was spilled?

20 A. Creosote oil.

21 Q. In both instances?

22 A. In both instances.

23 Q. Do you recall what the cause of that spill
24 was?

25 A. Yes, the one northwest of the refinery, they

1 were loading a tank truck and the riser got loose for
2 some reason or another and kicked up and sprayed
3 several gallons of creosote oil on the truck and on the
4 ground.

5 Q. So you are talking less than 100 gallons?

6 A. I would say so, yes. The incident southeast
7 of the refinery --

8 Q. Did you mean southwest?

9 A. Or southwest, I am sorry, was an incident
10 that occurred after I had just finished completely
11 cleaning the area up and one of my operators lined up
12 his valves wrong and blew some creosote oil into the
13 one remaining underground tank and it shot straight up
14 in the air and sprayed out on the newly cleaned area.

15 Q. How many gallons was that?

16 A. That would have been 55 gallons or less.

17 Q. What was done with the material that was on
18 the ground in those instances?

19 A. In the first instance, as I recall, we
20 brought in some sand and spread it around and absorbed
21 it and picked it up and disposed of it.

22 Q. Where?

23 A. I do not know where it was disposed of.

24 Q. You wouldn't know whether it was on or off
25 site?

1 A. I would not, no.

2 Q. Okay.

3 A. In the second instance the operator inherited
4 that job of clean up as a result of the spill. The top
5 surface of the soil that was discolored was removed and
6 replaced with new soil.

7 Q. And that removed soil was -- do you know the
8 ultimate disposition of that also?

9 A. I never knew where these materials went to.
10 Ward Barton generally handled the disposal of the
11 materials that were collected and disposed of.

12 Q. Is he alive?

13 A. To the best of my knowledge.

14 Q. Do you know where he is living?

15 A. No, I do not.

16 Q. You don't know what city he is living in?

17 A. No, sir, I do not.

18 Q. Do you know if there was any -- I realize you
19 just stated that Ward Barton handled your end of the
20 business, so to speak, was in charge of handling the
21 disposal of materials, is that correct?

22 A. He had the equipment, trucks and this sort of
23 thing that would handle it. I would clean it up. We
24 would place it in containers, I don't recall whether it
25 was a dump truck or maybe a dumpster, and he took care

1 of it from there.

2 Q. You mentioned, I think earlier, that you had
3 two foremen working under you. It sounded as though
4 you had one foreman working under you and that foreman
5 had a foreman working under him, is that correct?

6 A. That is correct.

7 Q. Is Ward Barton the foreman who was working
8 under you?

9 A. No.

10 Q. Would that have been Monroe Brown?

11 A. That would have been Monroe Brown.

12 Q. And Ward Barton would have worked under
13 Monroe Brown?

14 A. Ward Barton was the treating superintendent.
15 He was my counterpart in the treating plant, he worked
16 for Mr. Finch.

17 Q. Who worked under Monroe Brown?

18 A. I don't recall the man's name.

19 Q. You mentioned something about -- I can't
20 recall the name of the man, but you indicated he was
21 not part of the union bargaining group. What was the
22 union bargaining group?

23 A. That was the employees in the plant that were
24 members of the union that represented the employees in
25 the plant.

1 Q. Were all of the employees basically
2 nonmanagement members of a union as far as you know?

3 A. There were some exceptions, the laboratory
4 personnel were non-union and the office staff was
5 non-union.

6 Q. Those who did belong to a union, what union
7 was that?

8 A. I don't recall.

9 Q. Do you know which employee was the union
10 steward or the union representative while you were
11 there?

12 A. There were several stewards. I had a steward
13 in the refinery. I don't recall his name, it's
14 mentioned in one of the documents that I looked at this
15 morning. I can get it for you if you would like.

16 Q. Would you please?

17 BY MR. LEININGER:

18 Q. Other than this one individual that we are
19 apparently trying to identify, are there any other
20 Stewards that you would be able to recall their names?

21 A. I cannot recall the other steward or the
22 president. His name was Schmidt.

23 Q. You wouldn't recall his first name, would you,
24 or would you?

25 A. I can't recall it at this time.

1 Q. I assume there were union contracts. Were
2 there union contracts that were negotiated between
3 Reilly and the employees?

4 A. Yes, there were.

5 Q. Were you involved at all in the negotiation
6 of those contracts?

7 A. Yes, I was.

8 Q. Do you recall whether or not there was any
9 provision relating to drinking water in the contracts?

10 A. There was a job classification, as I recall,
11 in the contract that covered one individual. This job
12 went way back to the beginning of the plant and was
13 kind of a -- I guess you would say institution. It was
14 unnecessary but it was carried on. There was one man,
15 his job was to carry water to the workers, that started
16 as I understand way back in the early years of the
17 plant and continued on even to the time I was there and
18 there was a job classification that covered him.

19 Q. Was there a job description I would assume?

20 A. No formal written job description, just a job
21 classification.

22 Q. Would this person who was supposed to carry
23 water to the workers, would he have been able or
24 allowed to obtain water from any of the wells on site?
25 In other words, did he have any restrictions as to

1 which wells he could obtain drinking water from?

2 MS. COMSTOCK: Can you pin down a period
3 of time you are talking about?

4 MR. LEININGER: From 1969 through 1971
5 or any other time.

6 A. I do not believe the water that he was
7 obtaining at that time was coming from a well.

8 Q. Do you know where he would have obtained it?

9 A. From a source in the washroom possibly.

10 Q. Is the washroom not supplied by a well?

11 A. It's my understanding the washroom was
12 supplied by city water.

13 Q. If he had wanted to, do you know if he would
14 have been allowed to use the water from the republic
15 deep well to supply water to the employees?

16 A. I don't know how to reply to that. The
17 question never came up and the decision never had to be
18 made.

19 Q. During the course of these union bargaining
20 sessions or negotiating the contract, so to speak, were
21 there any concerns or was there any discussion with
22 regard to drinking water?

23 A. Not that I recall.

24 Q. I am going to switch gears on you just for a
25 moment. You had mentioned earlier that the cooling

1 pond sometimes would get heated up for one reason or
2 another and you would reach a point where it wouldn't
3 be a good idea to recycle the water because it wouldn't
4 be cooling water I assume and it would just be too warm,
5 is that correct?

6 A. That's correct.

7 Q. And I believe you had stated that in that
8 case, rather than discharging that water back into the
9 cooling pond it would not go into the cooling pond but
10 into the ditch -- into the system involving the
11 settling basin and that type of thing?

12 A. Yes.

13 Q. About how often would that be the case?
14 Would you run into that maybe once or twice a week or
15 less than that or more than that?

16 A. I don't know.

17 Q. Was that part of the refinery process as a
18 whole?

19 A. Yes.

20 Q. So you would not know whether this was
21 something that was a rare occurrence or whether it was
22 more commonplace?

23 A. Based on the comparison I would use the word
24 rare rather than common.

25 Q. You indicated earlier that when you were

1 drawing comparisons between the Reilly Tar settling
2 basin and the proposed Eden separator that for one
3 thing I believe you indicated that the Eden separator
4 had drums which would remove the oil from the surface
5 of the mechanism, so to speak, or from the surface of
6 the separator, isn't that correct?

7 A. That's correct.

8 Q. Would they be removing material more or less
9 on a constant basis, assuming that the material would
10 be in there?

11 A. Yes.

12 Q. And you had indicated that the settling basin
13 that Reilly Tar had, if the oil was not removed on a
14 regular basis, that that would affect the the utility
15 of that settling basin, is that correct?

16 A. It would affect the efficiency of it.

17 Q. How often would that, in your opinion, need
18 to be cleaned out to actually be efficient?

19 A. I don't know.

20 Q. So your testimony is that you don't know how
21 often it would need to be cleaned out but that it would
22 need to be cleaned out in order to be run efficiently?

23 A. Yes.

24 Q. So would it be correct to state that it would
25 need to be cleaned out when it had a certain

1 accumulation of oil in it?

2 A. Yes.

3 Q. Do you know approximately how much oil that
4 would be?

5 A. No, I do not.

6 Q. Do you know about how often it was cleaned
7 out?

8 A. I do not.

9 Q. Do you know if it was cleaned out more than
10 once per year during your period of time at the site?

11 A. I don't know how often it was cleaned. I
12 would expect it to be cleaned more than once a year.

13 Q. But you wouldn't know that to be a fact
14 necessarily?

15 A. No.

16 Q. Which of the refinery processes used well
17 water and which used municipal water?

18 A. The only water used in the refinery process
19 itself was cooling water and the cooling water came
20 from the well entirely. The boiler used city water, if
21 you want to consider the boiler as part of the refinery
22 process.

23 Q. Why wasn't the well water used from the
24 boiler?

25 A. I don't know.

1 Q. Did Reilly Tar have to pay for that municipal
2 water?

3 A. Yes.

4 Q. Would you have an opinion as to whether or
5 not the municipal water was -- whether it was more or
6 less expensive to use municipal water than well water?

7 A. I don't know whether it would have been or
8 not.

9 Q. If there had been tar particles in the well
10 water what would have been the consequence of using
11 that well water in the boiler to heat?

12 A. It would coat your tubes and create problems
13 in heat exchange in the boiler and the case when I was
14 there we installed Zeolite water softeners. It would
15 have coated the Zeolit, the particles, and rendered
16 them ineffective.

17 Q. If there had been sand particles in the well
18 water would that have been any significant problem with
19 regard to using the well water for the boiler?

20 A. Yes.

21 Q. And what kind of a problem would that have
22 caused?

23 A. Sand in your water is going to create several
24 problems, it would be abrasive to your pumping system
25 and there again it would collect in your softeners,

1 certainly not desirable to have sand in your boiler.

2 MR. LEININGER: Thanks very much.

3 That's all the questions I have.

4

5

RECROSS-EXAMINATION

6 BY MR. COYNE:

7 Q. Mr. Justin, yesterday you brought with you a
8 notebook or steno pad, do you recall that?

9 A. Yes, I do.

10 Q. Do you have it with you again today?

11 A. I do not.

12 Q. Did you prepare that steno pad or notebook?

13 A. You mean my personal steno pad?

14 Q. Yes.

15 A. Yes, it is.

16 Q. And what did you include in the steno pad?

17 A. The steno padd had personal notes that have
18 nothing to do with this trial or company business.

19 Q. So it wasn't prepared by you to refresh your
20 recollection in preparation for your testimony here?

21 A. No.

22 MR. COYNE: Thank you.

23

24

25

1 STATE OF MINNESOTA)
) ss.
2 COUNTY OF WASHINGTON)

3
4 Be it known that I took the deposition of
5 William A. Justin, on the 13th, 14th and 15th days of
6 October, 1982, at Indianapolis, Indiana;

7 That I was then and there a Notary Public in and
8 for the County of Washington, State of Minnesota, and
9 that by virtue thereby I was duly authorized to
10 administer an oath;

11 That the witness before testifying was by me first
12 duly sworn to testify the whole truth and nothing but
13 the truth relative to said cause;

14 That the testimony of said witness was recorded in
15 Stenotype by myself and transcribed into typewriting
16 under my direction; and that the deposition is a true
17 record of the testimony given by the witness to the
18 best of my ability;

19 That I am not related to any of the parties hereto
20 nor interested in the outcome of the action;

21 That the reading and signing of the deposition by
22 the witness was executed as evidenced by the preceding
23 page;

24 That Notice of Filing was waived.

25 WITNESS MY HAND AND SEAL this ____ day of _____.

Kirby A. Kennedy
Court Reporter